



2008

City of Maricopa

Parks, Trails and Open Space Master Plan

2008 City of Maricopa Parks, Trails and Open Space Master Plan

City of Maricopa Arizona Pinal County

Prepared by: J2 Engineering and Environmental Design

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Introduction

Background and Purpose

The City of Maricopa is located in northern Pinal County, Arizona between Phoenix and Tucson and has a rich agricultural heritage defined by its open spaces, small city ambiance and relaxed character. The 2008 City of Maricopa Parks, Trails and Open Space Master Plan defines an approach for the next 20 years that will provide a balanced system of conveniently located parks, both active and passive, interconnected paths and trails system, open spaces and multipurpose recreational facilities. With the valuable direction provided by the City of Maricopa staff and City Council, J2 Engineering and Environmental Design inventoried the existing conditions and examined the community needs as well as consulted the previous and current planning documents to develop the 2008 City of Maricopa Parks, Trails and Open Space Master Plan.

The purpose of reassessing existing plans is to be able to comprehend the cities current state of affairs and how other projects might interact with the city's projects. The following materials were reviewed, particularly for aspects related to parks, trails and open space:

- The 2006 City of Maricopa General Plan
- The 2006 Pinal County Open Space and Trails Master Plan
- The 2008 Maricopa Regional Transportation Plan
- City of Maricopa Zoning & Subdivision Ordinances

The 2008 City of Maricopa Parks, Trails and Open Space Master Plan combines and builds upon these previous efforts and creates tools for future implementation of the plan. The plan focuses on the overall planning of public recreational facilities and services and establishes the basis for future locations of parks, trails and public open space as the City continues to grow.

The 2006 City of Maricopa General Plan, along with other approved zoning ordinances, establishes the foundation upon which this Master Plan was developed. Coordination with the City's neighboring municipalities (City of Casa Grande, Ak-Chin Indian Community, Gila River Indian Community, City of Goodyear, and Maricopa County) and Pinal County was undertaken to ensure that edge areas were addressed in terms of park service area coverage, recreation programming and open space and trail connectivity.

As stated previously, Maricopa is known for its small city atmosphere and rural character while still experiencing growth throughout the community. A common theme shared among members of the community is an interest in preserving this character as the population grows. The identification of several special use park and multi-use trail opportunities within this document are meant to address this desire.

The new master planned communities have provided many neighborhood parks, open spaces, paths/ trails and "life style amenities" specifically for residents within these communities. Although these master planned communities may provide parks, trails and open space, many times they are for private use only and do not serve the overall community needs. While many of the needs of the master planned community residents are being met, a shortfall has occurred in services for sports teams, dog parks, skate park and community centers both within and outside of the master planned communities. To meet these needs, community level parks owned and operated by the city are a focus of park facilities in this plan.

Neighborhood parks owned and operated by home owners associations are preferred to follow the current trend. This will enable the City of Maricopa to maximize limited budgetary dollars where the greatest impact can be made. However, strict enforcement to current city ordinances is critical to ensure the neighborhood level services continue to be met.

With the **2008 City of Maricopa Parks, Trails and Open Space Master Plan**, the City of Maricopa has an opportunity to better implement future parks, facility and recreation program needs and community desires while providing definitive input prior to preliminary or final platting.

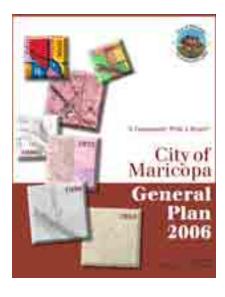
Review of Development

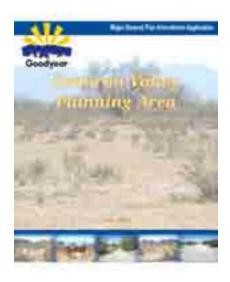
Reviewing master plans and studies provided the basis for determining the direction the city, developers, adjacent communities and agencies have taken to establish recreational opportunities and facilities to date. An evaluation of existing development and these master plans have helped to establish an approach that provides a cohesive and integrated 2008 City of Maricopa Parks, Trails and Open Space Master Plan. The following is a list of documents reviewed, incorporated and updated as a part of this planning effort:

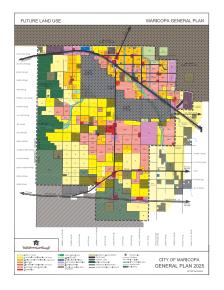
- City of Maricopa Subdivision Ordinance
- City of Maricopa Zoning Ordinances
- 2006 Maricopa General Plan
- 2008 Maricopa Regional Transportation Plan
- Sonoran Valley Planning Area (City of Goodyear)
- Pinal County Open Space and Trails Master Plan

Population projections are a key aspect of determining future recreation amenity locations. Needs were based upon the 2006 Maricopa General Plan and the 2008 Maricopa Regional Transportation Plan.

Many of the master planned communities within the City of Maricopa provide neighborhood parks. These neighborhood parks differ from city owned parks as these parks are private and do not provide public access. These parks are for the residents within the planned communities only.











Public Participation

- Direct Contact with 2,500+ residents
- 500 Questionnaires Completed
- Booth at 2007 Founders Day, 2008 Salsa Festival
- Presentation of Status and Opportunity for public Input at 3 Council Meetings



City of Maricopa Parks, Trails and Open Space Master Plan

Questionnaire
Open House #1 March 12, 2008

Listed below are facilities and services the City of Maricopa Parks and Recreation Department could possibly
provide. What <u>importance</u> do you think should be given to each? Please rate each on a scale of (0) zero to (1
pp. where (0) zero is of no importance and (10) ten is of the highest importance.

			Facilities a	nd Servi	ces		
		Low	High			Low	High
Α.	Amphitheaters	1234567	8 9 10	p.	Lighted sports fields	123456	78910
в.	Archery facilities	1234567	8 9 10	Q.	Outdoor swimming pools	123456	78910
C.	Baseball fields and practice fields	1234567	8 9 10	R.	Outdoor volleyball courts	123456	78910
D.	Basketball courts	1234567	8 9 10	s.	Overnight camping facilities	123456	78910
Ε.	BMX park	1234567	8 9 10	т.	Paved paths (Multi-use pedestrian and bike)	123456	78910
F.	Community centers	1234567	8 9 10	u.	Picnic facilities and shelters	123456	78910
G.	Dog parks	1234567	8 9 10	V.	Playgrounds for children	123456	78910
H.	Equestrian facilities	1234567	8 9 10	W.	Public golf courses	123456	78910
I.	Fitness, aerobic and weight centers	1234567	8 9 10	ж.	Rock climbing walls	123456	78910
J.	Football fields and practice fields	1234567	8 9 10	Υ.	Skateboard parks	123456	78910
K.	Frisbee golf course	1234567	8 9 10	z.	Soccer fields and practice fields	123456	78910
L	Teen Center	1234567	8 9 10	aa.	Softball fields and practice fields	123456	78910
M	Historical parks	1234567	8 9 10	ab.	Tennis courts	123456	78910
N.	Indoor swimming pools	1234567	8 9 10	ac.	Unpaved trails (Multi-use hiking, biking and equestrian)	123456	78910
0.	Large multi-use parks for passive and active	1234567	8 9 10	ad.	Water play facilities	123456	78910

Check which Parks and Recreation activities have you or a member of your family recently participated in or are planning to participate in? Please check the activities that apply below:

Activities	Have participated	Plan to participate	Activities	Have participated	Plan to participate
Youth programs			Senior programs		
Youth basketball			Adult programs		
Youth soccer			Adult co-ed softball		
Teen programs			Men's basketball		
After school programs			Men's softball		
Aquatics			Special Events		
Adult Flag Football					



City of Maricopa Parks, Trails and Open Space Master Plan

Questionnaire

Would you prefer a neighborhood park to be owned and maintained by a Neighborhood Home Owner's Association the City of Maricopa?

Neighborhood HOA: _____ City of Maricopa: _____ No Preference: _____

In general, and only thinking about City of Maricopa Parks and Recreation facilities, how would you vote on a funding measure for each of the following:

me	asure for each of the following:				
	Potential Funding	Definitely Vote For	Definitely Vote Against	Don't Know/ Unsure	
A.	The repair and maintenance of existing City of Maricopa parks and facilities	1	2	3	
В.	Construction of new parks and facilities within the City of Maricopa	1	2	3	
C.	Land acquisition for preservation of open space by the City of Maricopa Parks and Recreation Department	1	2	3	
D.	Construction of community centers by the City of Maricopa	1	2	3	
E.	Development of a City-wide network of trails	1	2	3	

Please share any additional comments on this questionnaire and related items below

Process and Public Input

The process used to develop the 2008 City of Maricopa Parks, Trail and Open Space Master Plan followed a four step planning process as outlined below:

Planning Process

Inventory & Analysis - Goals & Objectives

- Conduct Analysis/Opportunities/Constraints
- Identify Design Goals and Objectives Development in a Work Session with Staff and Parks Recreation and Library Board
- Review existing city ordinances
- Program of Facilities and Set Priorities
- Establish Levels of Service
- Public Opinion/Attitudes Questionnaire
- Initial Public Input Open House

Concept Plan

- Prepare Concept Plan
- Public Input during two Open Houses
- Work Session with Staff and Parks Recreation and Library Board
- Presentation to City Council
- Achieve consensus and receive direction to move to Preliminary Master Plan

Preliminary Master Plan

- Prepare Preliminary Master Plan
- Present Preliminary Master Plan to Parks Recreation and Library Board for review and approval
- Present Preliminary Master Plan to City Council for review and approval
- Receive direction to move to Final Master Plan.

Final Master Plan

- Prepare Final Master Plan
- Present Final Master Plan to Parks Recreation and Library Board for review and approval
- Present Final Master Plan to City Council for review and approval
- Final Master Plan Approved
- Amendments to subdivision / zoning ordinances

Thank you very much for your time and comments as they are very valuable to making the Maricopa Parks, Trails and Open Space Master Plan a success. If you have any questions or concerns about this questionnaire please contact:

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Public Input

Public input was sought throughout the planning process. This input was gathered through a series of open houses, public events (Founders Day & Salsa Festival), public meetings, questionnaires and meetings with the Parks, Recreation and Libraries Advisory Committee. Gathering input at a variety of events enabled J2 Design and City of Maricopa staff to have direct contact with 2,000+ residents of all ages.

Questionnaire Summary

A questionnaire was distributed at the annual Founders Day Celebration, the City of Maricopa webpage, an Open House and at the city offices. Over 800 questionnaires were completed and returned to J2 Design. For the detailed Questionnaire Summary, see Appendix 'A'. At the 2008 City of Maricopa Salsa Festival the preliminary results of the questionnaire were on display as well as our preliminary community park, trails and open space maps. Approximately 800 residents stopped by the J2 Design booth providing additional feedback. These large public events provided an excellent opportunity to gather public comments in an informal relaxed atmosphere. Comments were recorded as reflected in the Questionnaire Priorities, see figure 1 below, a majority of the residents recommended a need for large community parks, a community center, trails, picnic facilities, courts (volleyball / basketball / tennis), dog parks and skateboard parks. At the neighborhood level, for the most part, residents felt they were adequately served with the smaller parks and paths.

Figure 1 Questionaire Priorities

Priorities
High
Large Multi-Use Community Parks Lighted Sports Fields (Football, Soccer, Baseball / Softball) Playgrounds for Kids Community Center Water Play Area Public Swimming Pool Fitness Center Trails and Paths Picnic facilities Basketball Courts
Volleyball Courts Dog Parks Tennis Courts Skateboard Parks
Mid
Rock Climbing Walls Historical Parks Amphitheatres Public Golf Course Overnight Camping Facilities BMX Park
Low
Frisbee Golf Equestrian Facilities Gun Range Archery Facilities

Inventory

A detailed inventory was performed of parks and open space within the City of Maricopa. The development within the existing city limits in recent years has resulted in an abundance of small neighborhood and turf parks (see Table 2 Existing HOA Parks Summary). This development trend has been encouraged by the city ordinances. This trend has enabled a majority of the residents within the city to be in close proximity to picnic areas, children's play structures and multi-purpose turf areas. However, the inventory analysis has shown a gap in the availability of sports fields, community / aquatic centers, dog parks, skate parks etc. (see Table 1 Existing Inventory (City and HOA)). Larger recreation components as well as publicly owned facilities are lacking within the current city limits.

Table 1 Existing Inventory (City and HOA)

Facility	Existing Facilities (HOA / City) 2008	Existing Facilities (City)
No. of Open Turf Areas	99	0
Acres of Open Areas	105	0
Parks with Facilities	76	1
Parks with Facilities	248.72	19
Ramada's	82	4
Baseball (official 90')	0	0
Softball / Little League (60')	0	0
Softball	4	2
Soccer / Football	5	1
Basketball	14.5	2
Tennis	6	2
Children's Play Area	129	1
Splash Pads	4	0
Swimming Pools	7	0

^{*} Rotary Park Pool (Private non-profit owned)







Open Space and Parks

As the map below (see figure 2) details, the current open space requirements (Ordinance Number 05-07) have done a tremendous job. Open space and neighborhood parks are spread throughout the existing neighborhoods that were developed in the early 2000's. The 2008 Parks, Trails and Open Space Master Plan neighborhoods that were developed in the early 2000's. The 2008 Parks, Trails and Open Space Master Plan will expand upon the existing open space guidelines.

Table 2 Existing HOA Parks Summary

HOA Parks	Inventory
Greater than 5 Acres	12
Less than 5 Acres	165
Tot Lots	77

Figure 2 Existing Parks and Open Space



Open Space

Overview/Definition and Analysis

Open space is generally associated with passive recreation activities and provides a contiguous network of corridors and areas for trail linkages, view shed preservation, wildlife habitats, preservation of cultural and historic sites, park facilities, and drainage corridors. The **2008 Parks, Trails and Open Space Master Plan** will consist of wash corridors, wildlife habitat and desert land areas. In addition, utility, railway, canal, and public rights-of-ways will also serve to provide open space linkages. Recommended development for open spaces to meet the 2015, 2020, 2030 and "build-out" needs includes providing recreational and interpretive multi-use trails and paths; trailheads with amenities, signage, and parking; as well as acquiring sufficient, usable land areas for future recreational development.

This plan has mapped and evaluated open spaces based upon natural, cultural, political, man made and legal features. By combining these features through a constraint composite, the lands that meet the open space criteria have been mapped. The ultimate location and type of recommended facility development will be further described through City staff and community input in ongoing efforts with developers, Arizona State Land Department (ASLD) and Bureau of Land Management (BLM).

Open Space Criteria

In defining the Open Space, as indicated in this plan, criteria for "sensitive lands" was mapped and applied to the City of Maricopa planning area. Application of these criteria through an overlay application process provided a clear definition of the lands suitable for open space preservation/conservation. The criteria used during the overlay process took the following conditions/criteria into account:

- 100 year flood plains (washes etc.)
- Planned Area Development (PAD) Planned Open Space

 all PAD's shall provide a minimum of 20% of the net
 acreage as open space unless otherwise approved by
 the City of Maricopa.
- Known cultural resources sites
- Community, Neighborhood and Special Use Parks
- Canals
- Power line corridors
- Mountain peaks
- 15% + slopes
- Railway corridors
- Gas line corridors

The defined "Open Space Map" (see page 10 figure 3) is a composite of the above criteria applied and combined.

The criteria used to identify land which has a potential to be used as opens space requires a flexible approach to acquisition of the land. The different approaches will be discussed in the upcoming pages. In general, the tools for application and acquisition of open space lands include:

- Conservation overlay with private land ownership such as utilities (power companies, gas lines etc.), non-profits (Nature conservancy etc.) or private lands.
- Inter-Governmental Agreement (IGA) with Flood Control, Bureau of Reclamation (BOR), or other agencies.
- Direct Purchase of lands from private ownership or ASLD
- Lease agreement with BLM through a Recreation and Public Purposes Permit/Lease (RP&P)



Open Space Requirements

Key Open Space Requirements Under Ordinance 05-07

- 20% Required Open Space
- 7 acres of Neighborhood / Subdivision Parks / 325 lots
- 10.1 acres of Open Space per 1,000 population
- 1/2 acre and Greater Retention Basins Must be Turfed and Equipped to Accommodate a play / sport fields

Possible Additions to Current City Ordinances:

- Slopes of 15% or More To Be Preserved as Open Space
- Strengthen Requirements of What Makes A Turf Basin Usable as a play / sport field.





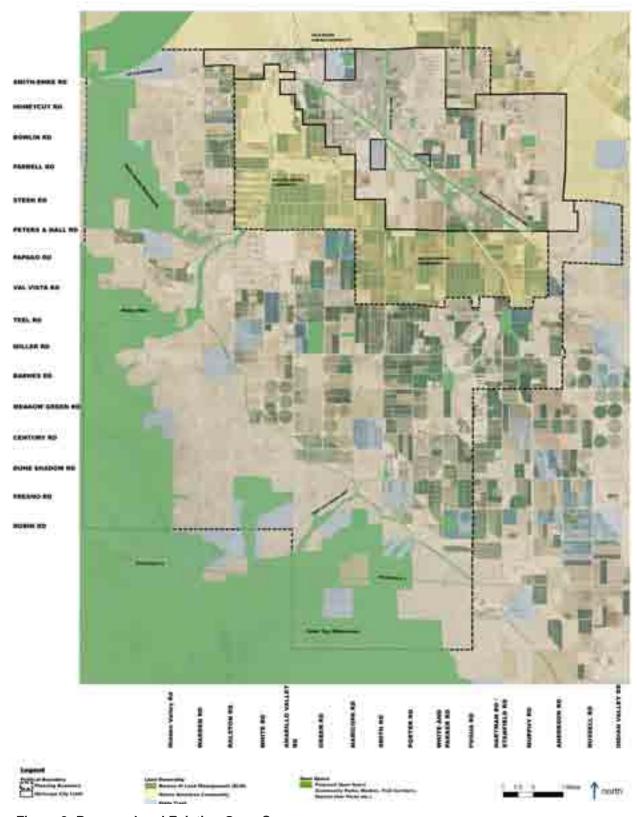


Figure 2: Proposed and Existing Open Space

BLM Land

A large portion of the western City of Maricopa planning area is under the jurisdiction of the BLM. This includes the Haley Hills area and the Palo Verde Mountains. This document denotes several trails and trailheads within this area in order to accommodate the growing population's recreation needs. A grass roots campaign by local residents to preserve this area is currently underway.



Opportunity

A large portion of the wester planning area is currently under the jurisdiction of the BLM. This has the opportunity to become the cornerstone of the City of Maricopa's Parks System.

Issues regarding off-road vehicle access to these lands are an on-going issue. It is the recommendation of this document that a partnership with the BLM take place before growth encroaches further on this area. The conversion of this land into a park which includes a management plan for off-road vehicles would serve not only the recreation needs of the public, but also preserve the habitat value of the land.

This site offers a tremendous scenic and recreation opportunity for residents and visitors to the City of Maricopa. This land holds the promise to become the crown jewel of the City of Maricopa's parks.

BLM Recreation and Public Purposes Act *

Over the past 40 years, Americans have expressed a dynamic and accelerated interest in outdoor recreation. Our expanding urban populations, increased mobility and leisure time, and higher standard of living have created a demand for more and better recreation facilities. By the same token, urban expansion and a growing population have increased the need for more public services, such as schools, community buildings, hospitals, and sanitary landfills, just to name a few.

Recognizing the strong public need for a nationwide system of parks and other recreational and public purposes areas, the Congress, in 1954, enacted the Recreation and Public Purposes Act (68 Statute 173; 43 United States Code 869 et. seq.) as a complete revision of the Recreation Act of 1926 (44 Stat. 741). This law is administered by the Bureau of Land Management (BLM).

The act authorizes the sale or lease of public lands for recreational or public purposes to State and local governments and to qualified nonprofit organizations. Examples of typical uses under the act are historic monument sites, campgrounds, schools, fire houses, law enforcement facilities, municipal facilities, landfills, hospitals, parks, and fairgrounds.

A pamphlet designed to guide prospective applicants in obtaining lands and benefits under the act is available from BLM State Offices. Department of the Interior regulations for the Recreation and Public Purposes Act are found in Title 43 of the Code of Federal Regulations (43 CFR), Parts 2740 (Sales) and 2912 (Leases).

What Lands are Covered by the Act?

The act applies to all Public Lands, except lands within national forests, national parks and monuments, national wildlife refuges, Indian lands, and acquired lands.

How much Land may be Purchased?

The amount of land an applicant can purchase is set by law. Whether the land is to be purchased or leased, the BLM will classify for purposes of the act only the amount of land required for efficient operation of the projects described in an applicant's development plan. Applicants should limit the land requested to a reasonable amount. Applicants will be required to first accept a lease, or lease with option to purchase, to assure approved development takes place before a sale is made and a patent (Government deed) is issued. Projects that may include the disposal, placement, or release of hazardous materials (i.e., sanitary landfills) may go directly to patent.

Other Political Subdivisions and Nonprofit Organizations

Counties, cities, or other political subdivisions of a State and nonprofit organizations may purchase up to 640 acres a year for recreation purposes, and an additional 640 acres for other public purposes. These lands must be within the political boundaries of the agency or within the area of jurisdiction of the organization or, in the case of cities, they must lie within convenient access to the municipality and within the same State.

How Much Land may be Leased?

The Act sets no limitation on the amount of land that may be leased.

Recreation and Public Purposes Act Application Form:

https://www.blm.gov/FormsCentral/show-form.do?nodeId=645



Washes

Washes within the desert provide not only drainage for the area but also recreational opportunities. Three major washes are within the City of Maricopa's planning area: the Vekol Wash System, Santa Cruz Wash and Santa Rosa Wash. Consideration should be given to joint projects as well as buffer zones for the Gila River Indian Community and the Ak-Chin Indian Communities.



Community, Village and Grand Parks

Community, Village and Grande Parks serve as important open space areas within the city. Approximate locations for each community park have been specified with the intent to serve the greatest number of people with the least amount of travel time. These locations are not intended to identify actual parcels. Specific site locations will be determined at a future time. Many of the parks are located along drainage corridors or within flood plains. This allows the limited amount of land within Maricopa to be used with greatest efficiency while still maintaining natural drainage patterns. Connectivity to the paths and trails system enables access to the greater open space network.

Special Use Parks

Special use parks are a critical element of the open space network. These preserve the history and essence of what makes the City of Maricopa unique. As the city grows, the preservation of this history and character will connect new residents with the long time residents of the areas. The recommendation is to preserve unique farming structures, archeological sites and washes as special use parks.



Private HOA Parks and Open Space

As mentioned previously, the City of Maricopa has a large number of private HOA parks and open space within existing neighborhoods. This has offered a variety of recreation opportunities within walking distance of most residents. Diligent enforcement of existing open space and subdivision ordinances are critical to ensuring residents continue to have adequate access to these neighborhood level services. This will enable City of Maricopa parks department to concentrate on the large scale community, village and grand parks.





Ordinance Opportunity

- Open Space provided per the approved Parks, Trails and Open Space Master Plan (PTOS).
- Open Spaces must be continuous, no "breaks" allowed within a development or from development to development.
- Open Space use is considered "public" open to all citizens of the City of Maricopa.

Open Space Connectivity

The goal of the Open Space plan is to not only offer recreation opportunities for the residents within the city but to also preserve the natural ecosystems. A connected open space network allows wildlife, water and residents to traverse the city at ease with minimal conflict with automobiles.

Environmentally Friendly Living and Green Trends

To continue the quality of life expected by the citizens in the city implementing and practicing principles of sustainability are encouraged. Sustainability is the ability to maintain an ecological balance in an area by not exploiting the natural resources. Landscape standards to create a sustainable site include:

- Greenhouse gas emissions—Trees, shrubs and groundcover help reduce carbon dioxide in the atmosphere by capturing and storing it for use in producing roots, leaves and bark.
- Urban Climate Trees in urban settings reduce the heat island effect and provide windbreaks.
- Biodiversity Landscaping promotes biodiversity with a mix of native species and environmentally appropriate non-native species. Non-native invasive species that have been introduced in the United States continue to spread and result in control costs and elimination of native species.
- Water Waste Good design and techniques reduce this runoff. Conventional drainage systems typically deliver larger volumes of water to streams and washes in a shorter amount of time, leading to increased downstream flooding, erosion, water quality degradation and fewer opportunities to enjoy the aesthetic and recreational benefits of streams and lakes.
- Water Pollution Careful plant selection and organic soils additions reduce the use of pesticides and fertilizers that can contaminate water.
- Yard Waste Composting leaves and grass not only enrich the soil, it also reduce the landfill volume by as much as 18%.
- Public Health The positive effects that views of plants have on the overall health of people are exceptional and well documented.
- Energy Consumption The use of local, sustainable materials reduces energy demands to produce and transport the materials.

Park and Recreation Facilities

Introduction

The City of Maricopa currently maintains one community public park, Pacana Park. This facility contains lighted softball fields, a soccer field, basketball courts, tennis courts, a fishing lake and children's play area. Pacana Park is in many ways the heart of Maricopa at this time. City wide events such as the annual Founders Day Festival, 4th of July Great American BBQ and Maricopa Salsa Festival are held at Pacana Park. The City of Maricopa has grown rapidly since its incorporation in 2003; this growth has been primarily in the form of master planned communities. The City of Maricopa has required a 20% open space policy for these communities. This has enabled the establishment of a network of open spaces, pocket parks and neighborhood parks throughout the city.

The City of Maricopa has rich cultural, historical, topographic, vegetative, view shed and habitat resources. Every effort in planning, design and operations of each individual park should take this into account during the design and site selection process. This plan addresses these resource values in the park locations, sizes and potential uses. Further efforts in bringing these planned and proposed parks on line must support this philosophy to achieve the vision.



Existing Park and Recreation Facilities

The inventory and analysis of the existing parks and recreation facilities within the City of Maricopa includes both existing and planned facilities for the park classifications. The inventory identifies each park facility, type and acreage.

The inventory and analysis of the existing and planned parks and recreation facilities was completed to determine the extent of park types and sizes and recreation facilities within the city. These existing parks and facilities are quantified based on the organization of parks and facilities by type and the application of the recommended park and recreation facility standards. These standards provide a benchmark for review, comparison of citizens' needs and determine an appropriate level of service standard for the city.



Table 3 Existing City Owned Facilities

Facility	Existing Facilities
Baseball (official 90')	0
Little League (60') / Softball	2
Softball	0
Soccer / Football Lighted	2
Soccer Non-Lighted	1
Soccer Overlay on Ballfield	2
Multi-Use Fields	0
Basketball	2
Volleyball	2
Tennis	2
Children's Play Areas	1
Picnic Ramada's	3
Restroom	1
Lake	1



Standards

The basis for "standards", utilized in the level of service (LOS) master plan, come from NRPA (National Recreation and Park Association) park and recreation association's park planning documents. The publications from which the standards are referenced include: "Park, Recreation, Open Space and Greenway Guidelines (NRPA 1996)", 1996, National Recreation and Park Association, Mertes and Hall, "Recreation, Park and Open Space Standards and Guidelines (NRPA 1983)," 1983, National Recreation and Park Association, Lancaster, and "Master Plan Process", 1996, American Association for Leisure and Recreation, Kelsey and Gray.

Park Types Definitions and Standards

Parks within this plan can be categorized into 5 general categories: Neighborhood, Community, Village, Grand and Special Use Parks. See table 4 for recommended LOS standards for each park type. City of Maricopa Ordinance Number 05-07 specifies detailed standards for Neighborhood level parks. Recognizing current development trends, the smaller neighborhood parks will continue to be developed and maintained by private developments. This will enable the City of Maricopa to focus on the larger community parks and special use parks.



Recommended LOS Standards

Based upon the Comparison of Standards, recognized park standards and staff input, the recommended standards for park, trails and open spaces are in table 4 below. Village and grand parks are meant to provide a LOS for a 3 mile radius for everyday sports and community park activities. However, due to the sizes and unique features of these types of parks they can serve a larger area for unique activities. Specialty parks are meant to capture unique aspects of the city, therefore their LOS is the entire community. Specialty parks will very in size from a 1 acre farmstead to a several hundred acre wash system.

Table 3 Recommended LOS Standards

Park Type	Acres	Geographic Service Area	LOS Pop. Served
Neighborhood Park (HOA)	10	1/2 Mile Radius	5,000
Community Park	20-79	3 Mile Radius	10,000-50,000
Village Park	80-200	3 Mile Radius	50,000+
Grand Park	200+	3 Mile Radius	50,000+
Special Use Park	Varies	City Wide	City Wide

Future Park Needs

The future park acreage needs for the residents of the City of Maricopa are based on anticipated population projections. Population projections are based upon the 2008 Regional Transportation Study as well as the 2006 City of Maricopa General Plan. Utilizing the recommended standards for sizes, types and numbers of parks, the quantities, sizes and locations of parks were tailored to and located to meet the needs of Maricopa residents and to effectively allocate available park acreages and sites throughout the City.

Based upon the standards comparison and review with city staff, the recommended standards are proposed for the City of Maricopa. These recommended standards are defined in the "Recommended Park Level of Service Standards" table (Table 4). These standards were used for application in both the mapping and tabular calculations of needed parks and facilities. The statistical tabulation of needed parks, per classification type and land area is listed in the "Recommended Parks Future Needs" table (Table 5).

The Park Acreage Development Program is used to determine the amount of acreage required to meet the 2015, 2020, 2030 and Build-Out park and recreation needs. The appropriate type of park is based on the criteria and analysis presented in the recommended standards. Utilizing the desirable size for park facility types, the recommended development of these facilities is indicated below.

Table 5 Recommended Future Park Needs

Year	2008	2015	2020	2030	Build-Out
Population	36,446	106,000	181,000	517,651	660,254
Community, Village & Urban	1	2	4	10	16

New Park Siting Program

The approach to siting the new facilities identified in the Park Quantity and Acreage Development Program is to adequately serve city residents who are not being reached within the service areas of the existing facilities. To achieve the vision and goal of the City of Maricopa, the following criteria should be utilized when siting or acquiring land for a new park:

- Identify major physical barriers that create facility service area edge buffers. These include: major roadways and freeways, rivers and utility corridors.
- Accommodate modifications to park "service radius" dimensions in areas of rugged topography and low density (1 DU/AC or less) while still following the population LOS requirements.
- Identify compatible land uses for each park or facility type. These include:
 - Neighborhood Parks (HOA Owned) are ideally located in residential areas providing convenient, non-vehicular access for the targeted users. Site Neighborhood Parks with a maximum of ½ to ½-mile walking/biking distance to residences. Connect via paths, trails and sidewalk system.
 - Community, Village and Grand Parks are ideally located near or in commercial, industrial, or flood plain areas where lighted sports facilities and parking overflows minimize impacts on affect residents.
- Identify independent recreational resources, such as master planned community parks as "neighborhood parks", only to minimize facility duplication and overlapping of service areas for populations being served by other facilities such as those provided within planned developments.
- Identify locations that minimize pedestrian/bicycle and vehicular conflicts by responding to the existing and planned major arterial roadway network, on-street bike routes, and multi-use path and trail network.
- Incorporate Trailheads into all parks that connect to or are adjacent to trails, paths and open spaces.
- Incorporate Park and Rides when possible. This is an ideal way to maximize the budgetary dollars while providing services to the community.

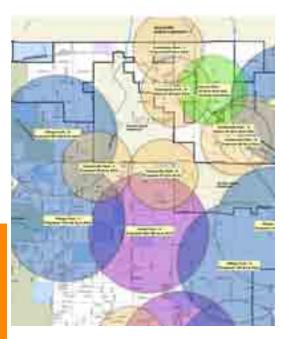
The plan recognizes that much of the new growth and development in the City of Maricopa is within master planned communities (MPC). Many of the MPC's provide a high level of neighborhood amenities including parks, trails and open space. While these amenities serve the individual MPC, they do not always accommodate the general public due to the nature of ownership. Recognition of the private recreation facilities does not replace public parks and facilities but may reduce the total quantity of acres and facilities within a MPC if it is determined in the planning and development approval process that the "recreation value" meets the greater need of the citizens of the City of Maricopa. Master Planned Community park lands shall only count towards the neighborhood level of service and not count for community or special use parks.



Park Siting Program

- 1. Identify Major Physical Barriers
- 2. Adjust LOS "Service Radius" to topography and different population densities.
- 3. Identify Compatible Land Uses for Each park or Facility
- 4. Identify Independent Recreational Resources
- 5. Incorporate Trailheads
- 6. Incorporate Park and Rides When Possible





Parks and Service Areas

The following series of maps identifies the potential park locations (these are not exact locations, that will be determined on a future date) and service areas. These parks are defined as the "core active" park types which include Community, Village and Grand Parks.

The service area denotes the area in which according to the 2006 Maricopa General Plan Future Land Use Map a certain size population will reside. For example, an 80 acre Community Park is located in an area where within 3 miles it is expected there will be a population of at least 50,000 residents. The actual park sites will each require a specific site review and analysis. In order to define the particular park parcel, adjacent land uses and other site constraints will need to be taken into account. Additionally, the application of the "Park Siting Criteria" should be implemented for each park.

Recreation Facility Analysis and Standards

The future recreation facility needs for of the City of Maricopa are based on the future population projections and the application of the recommended standards for the number of facilities per/1000 populations.

Based upon the standards comparison, the recommended standards are proposed for the City of Maricopa. These recommended standards are defined in the "Recommended Facility Needs" (see table 6). These standards were used for application in both the mapping and tabular calculations of needed parks and facilities.

Site Amenities/Passive Recreation

Passive recreation and site amenities represented in the form of picnic facilities, open un-programmed turf areas, picnic ramadas, restrooms, benches, lighted pathways, barbecues, and drinking fountains is well provided for in the existing city park and recreation system. By implementing the park types and facilities per the park type definitions in the quantities per the recommended parks needs, these passive uses and amenities should continue to be met.

Active Recreation Facilities

The future active recreational need for the City of Maricopa is summarized in the Recommended Facility Needs (see table 6). Level of service requirements are applied per facility and projected needs for 2008, 2013, 2018 and 2028. The need listed does not include the existing facilities.

Table 6 Recommended Facility Needs

Facility	LOS	Ex 2008	Need 2008	Need 2015	Need 2020	Need 2030	Need 2030
Popula	ation		36,446	106,000	181,000	517,651	660,254
Baseball (official 90')	25000	0	1	4	7	21	26
Softball / Little League (60')	10000	2	2	9	16	50	64
Softball	5000	0	7	21	36	104	132
Soccer / Football	7500	2	3	12	22	67	86
Basketball	5000	2	5	19	34	102	130
Volleyball	10000	0	4	11	18	52	66
Tennis	6000	2	4	16	28	84	108
Swimming Pools	35000	1	0	2	4	14	18
Skateboard Parks	100000	0	0	1	2	5	7
Off-leash/Dog Parks	100000	0	0	1	2	5	7
Community Center	50000	0	1	2	4	10	13

Golf Courses

The City currently does not have any publicly operated golf courses. The golf course need is being met by a privately developed and owned course. The recommendation of this plan is to continue to use privately owned/public access courses to meet the golf needs for the residents of Maricopa.

Neighborhood (HOA Built & Owned) Parks

The intent of a Neighborhood Park is to serve the immediate neighborhood with a "walk to" park. While the Neighborhood Park Standard established in this master plan defines a Neighborhood Park as a 10 acre site serving up to 5000 population with a service area of a one-half mile radius, this master plan recognizes current development trends in PAD's and MPC's that often provide Home Owner's Association (HOA) owned and maintained parks for those communities. These HOA parks can serve as a "Neighborhood" Park in place of the "Standard Neighborhood Park" if quantitative and qualitative criteria are met as described below.

PAD/MPC HOA Neighborhood Park (Park): A park by size, program and location that provides 'usable' park space with an emphasis on multi-purpose, outdoor recreation facilities for the immediate neighborhood in which it is located. 'Usable' park space has a minimum size of one-third acre that includes (1) large piece of play equipment or one-half acre of contiguous flat turf for recreation activities and meets the following performance standards.

Performance Standards for PUD and Master Planned Community HOA Owned and Operated Parks:

- Can be counted as part of the overall Open Space requirement
- Acres of Neighborhood Park/Lots (7 acres/325 lots)
- Park sites/lots (1 park site/80 single family lots or 1 park/250 multi-family units)
- 'Pocket' Park site size (one-third to 2-acres) or one-half acre of contiguous flat turf for recreation activities
- 'Anchor' Park sites size (2 acres min.)
- Ratio of Parks: 4 'Pocket' Parks to 1 'Anchor' Parks
- Route to Park from lot maximum "walking" distance (one-quarter mile, 1320 LF)
- Must be ADA accessible route, either along a public street or through open space
- Paths/Trails to detach from curb once they reach the Park's property line
- Open Edges: Park edge that is adjoining a dedicated open space or a street
- Parks with a single open edge require that edge to be 50% of the entire perimeter of the park.
- Parks with multiple open edges require a total of 30% of the perimeter of the park to be open edge.
- Minimum turf "flat" area: "flat" is defined as a consistent grade under 3% slope
- If a Park (Pocket Park only, Anchor Park must have turf) has no turf, developer shall tree line all paths/ trails with canopy to canopy coverage along with all other areas containing 50% coverage.

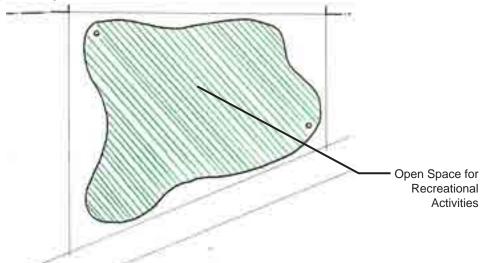
Open Space retention areas

- Retention or detention basins shall qualify as Park space only if they are landscaped, multi-tiered and designed to be used as an active multi-use area. Retention areas with a bottom area in excess of one-half acre shall be designed with "flat" turf and equipped to accommodate a multi-use field rather than being landscaped with decomposed granite.
- 75% of Parks shall include a piece of playground equipment and 25% shall have the required turf play area.

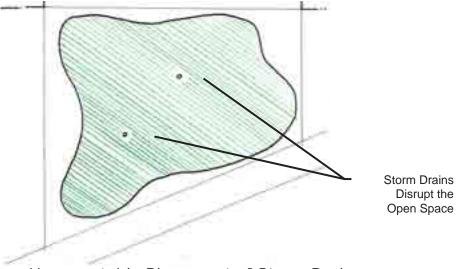
Maximum side slopes:

- Street edge 6:1
- Residential edge 4:1
- Park activity transition area 10:1
- Non-sports field turf area 4:1
- Landscape area 4:1
- Native landscape area 4:1 or to match native

Figure 4 Drywell Placement







Unacceptable Placement of Storm Drains

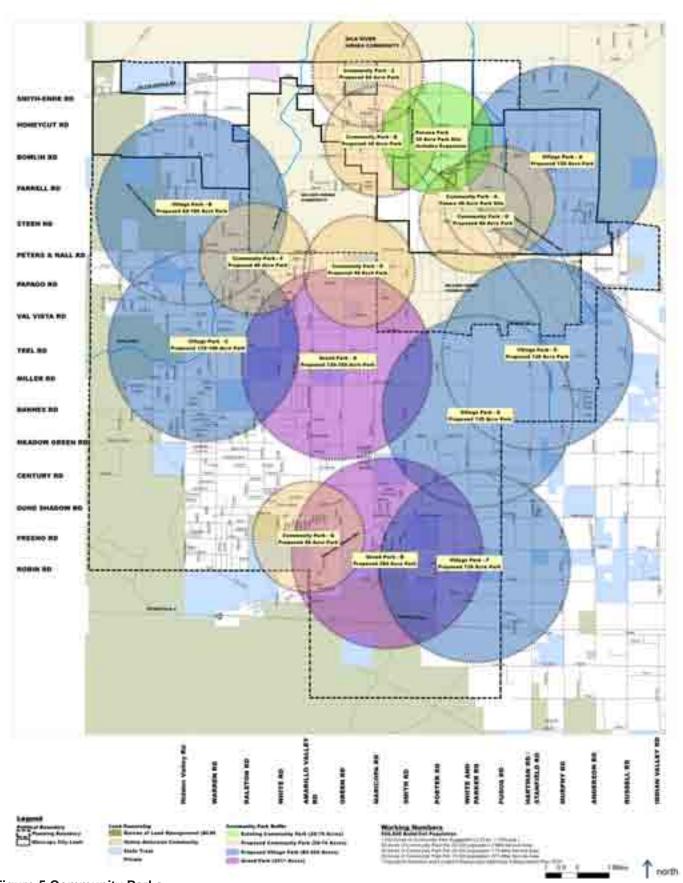


Figure 5 Community Parks

Planned Park Sites are approximte locations to be used as a planning guide. Actual locations will require further studay as development occurs within the planned park area.

Community, Village and Grand Parks:

Community, Village and Grand Parks should be accessible to many neighborhoods and their LOS service area, providing parking, safe bicycle and pedestrian access as well as intensive recreation opportunities. These parks usually include all of the uses contained in Neighborhood Parks, as well as additional acreage for athletic fields, courts, and special use facilities such as urban lakes, skate parks, large group picnic facilities, recreation centers, etc. These larger parks may also include fire/police stations, libraries and commercial development. The 3 mile service area serves an approximate population of 50,000. Typically these parks are a minimum of 50 acres. It is recognized that within the existing city limits of Maricopa Community Parks may be less than 50 acres. In this case the service area and population will decrease accordingly. Typical facilities located in these parks include:

- Baseball fields (lighted)
- Little league fields (lighted)
- Softball fields (lighted)
- Soccer fields (lighted)
- Volleyball courts (sand/lighted)
- Picnic areas with a mix of single, double and large group ramadas
- Children's tot lot areas
- BMX Park
- Skateboard Park
- Off-Leash Dog Park
- Community center/Recreation center (w/gymnasium, handball/racquetball, fitness area)
- Restroom/concession
- Parking (adequate level to serve the park facilities)
- Landscape open space areas (25-40% of site)
- Paths and Trails (connecting to neighborhoods and open space)
- Trailheads (if adjacent to open space or a path/trail)

Current growth projections performed during the 2008 City of Maricopa Regional Transportation Plan forecast a large commuter population within the City of Maricopa. This is typical for many cites within Arizona. As a method to mitigate traffic congestion, commute times and improve quality of life, the City of Maricopa began a commuter bus service in April of 2008. The commuter bus service has had a successful start. A cost effective method of providing park and ride locations in the future is to enable the park parking lots to double as park and rides. The central location of these parks and the differing time periods for parking requirements makes this an ideal use of the existing space.





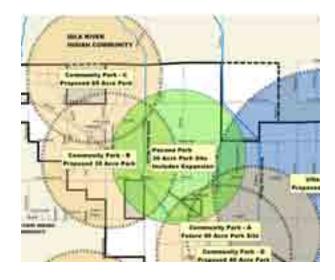
Pacana Community Park

Pacana Community Park is currently the only city owned community park within the City of Maricopa limits. The properties north, east and west are residential. The property to the south of the park is currently a vacant lot which is designated to be a religious institution. At the time of the development of the 2008 Parks, Trails and Open Space Master Plan Pacana Park is being expanded to include additional parking and soccer/football fields.

The 2008 population for the City of Maricopa is approximately 36,000 residents; however, the population for the City of Maricopa planning area is in excess of 60,000 residents. It was observed at community events that Pacana Park is being used by residents of the entire planning area and is a central gathering place for the area. Pacana Park is currently 19 acres and is set to expand by another 10 acres. The expanded 29 acre park can serve a population of 12,278 adequately according to NRPA park standards (based upon 2.5 acres / 1,000 people). Pacana Park is a tremendous resource for the City of Maricopa, but it does have limitations. Access to sports fields is limited due to the demand for these fields. As the population of Maricopa increases to 50,000 residents and the need for specific activities increases, the 29-acre park consisting of active facilities, will not meet the need of the future population.

Table 7 Pacana Community Park

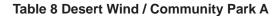
Facility	Existing Facilities	# of Proposed Facilities
Baseball (official 90')	0	0
Little League (60') / Softball	2	0
Softball	0	0
Soccer / Football Lighted	0	2
Soccer Non-Lighted	1	0
Soccer Overlay on Ballfield	2	0
Multi-Use Fields	0	0
Basketball	2	0
Volleyball	0	0
Tennis	2	0
Children's Play Areas	1	1
BMX Park	0	0
Roller Hockey	0	0
Skate Park	0	0
Dog Park	0	0
Picnic Ramada's	3	?
Restroom	1	1
Splash Pad	0	0
Swimming Pools	0	0
Community Center	0	0
Maintenance Facility	0	1
Amphitheater	0	0
Lake	0	1
Trail Head	0	0
Neighborhood Equestrian	0	0
Total Parking Needs		222 spaces



Desert Wind Community Park A

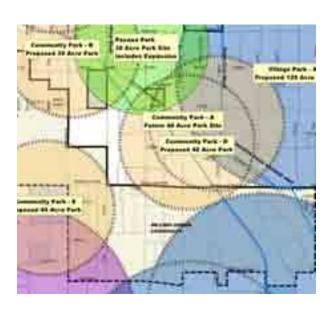
Desert Wind Community Park is a proposed 33.3 acre park within the Eagle Shadow subdivision, located adjacent to the Santa Cruz Wash between Farrell Rd and Steen Rd. As the Eagle Shadow subdivision approaches build out this community park will provide recreational opportunities for the surrounding community and provide relief for Pacana Park.

A total population of 28,534 can be served adequately by this park and Pacana Park. This will still be short of the 2008 population.



Facility	# of Proposed Facilities
Baseball (official 90')	0
Little League (60') / Softball	4
Softball	0
Soccer / Football Lighted	2
Soccer Non-Lighted	0
Soccer Overlay on Ball field	4
Multi-Use Fields	0
Basketball	4
Volleyball	0
Tennis	0
Children's Play Areas	1
BMX Park	0
Roller Hockey	0
Skate Park	0
Dog Park	1
Picnic Ramada's	5
Restroom	2
Splash Pad	1
Swimming Pools	0
Community Center	0
Maintenance Facility	1
Amphitheater	1
Lake	1
Trail Head	0
Neighborhood Equestrian	0
Total Parking Needs	527 spaces





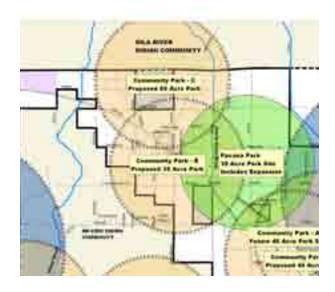


Community Park B

Community Park B, a 38 acre park site located in the general area south of the Maricopa Highway, west of Smith Enke and east of Green Road. The adjacent areas are currently planned for medium density residential, master planned communities and employment. As the population increases to 44,691 residents, Community Park B will be needed to fulfill the needs of the community.

Table 9 Community Park B

Facility	# of Proposed Facilities
Baseball (official 90')	0
Little League (60') / Softball	4
Softball	0
Soccer / Football Lighted	4
Soccer Non-Lighted	0
Soccer Overlay on Ball field	4
Multi-Use Fields	0
Basketball	0
Volleyball	0
Tennis	0
Children's Play Areas	1
BMX Park	0
Roller Hockey	0
Skate Park	0
Dog Park	0
Picnic Ramada's	6
Restroom	2
Splash Pad	0
Swimming Pools	0
Community Center	0
Maintenance Facility	1
Amphitheater	0
Lake	0
Trail Head	0
Neighborhood Equestrian	0
Total Parking Needs	588 spaces



Village Park A

Village Park A, a 132 acre park site located in the Northeastern section of the City of Maricopa planning area. The park site should be located in the general area between Honeycutt Rd on the north, Farrell Rd on the South, Hartman Rd. on the West and Murphy Rd. on the east. As the population increases to 101,140 residents, Village Park A will be needed to fulfill the needs of the community.

Table 10 Village Park A

Facility	# of Proposed Facilities
Baseball (official 90')	1
Little League (60') / Softball	3
Softball	3
Soccer / Football Lighted	4
Soccer Non-Lighted	0
Soccer Overlay on Ball field	9
Multi-Use Fields	0
Basketball	8
Volleyball	12
Tennis	8
Children's Play Areas	4
BMX Park	1
Roller Hockey	1
Skate Park	1
Dog Park	2
Picnic Ramada's	20
Restroom	4
Splash Pad	1
Swimming Pools	1
Community Center	1
Maintenance Facility	1
Amphitheater	1
Lake	1
Trail Head	0
Neighborhood Equestrian	0
Total Parking Needs	1,907 spaces



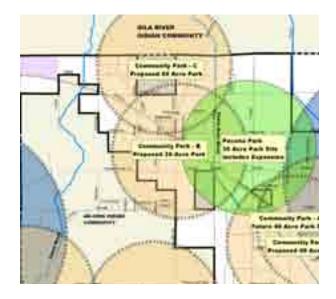


Community Park C

Community Park C, a 60 acre park site located in the North-central section of the City of Maricopa Planning area. The park site should be located in the general area between the northern edge of the planning area and Smith Enke Rd on the South, Green Rd. on the West and Sunset Drive on the east. As the population increases to 126,833 residents, Community Park C will be needed to fulfill the needs of the community.

Table 11 Community Park C

Facility	# of Proposed Facilities
Baseball (official 90')	0
Little League (60') / Softball	4
Softball	0
Soccer / Football Lighted	4
Soccer Non-Lighted	0
Soccer Overlay on Ball field	4
Multi-Use Fields	0
Basketball	2
Volleyball	2
Tennis	0
Children's Play Areas	1
BMX Park	0
Roller Hockey	0
Skate Park	1
Dog Park	1
Picnic Ramada's	4
Restroom	2
Splash Pad	1
Swimming Pools	1
Community Center	1
Maintenance Facility	1
Amphitheater	0
Lake	0
Trail Head	0
Neighborhood Equestrian	0



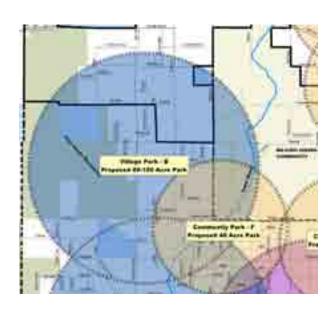
Village Park B

Village Park B, a 70 acre park site located in the North-Eastern section of the City of Maricopa Planning area. The park site should be located in the general area between Farrell Rd. to the north and Peters and Nall Rd on the South, Hidden Valley Rd. on the West and Warren Rd on the east. As the population increases to 156,824 residents, Village Park B will be needed to fulfill the needs of the community.



Facility	# of Proposed Facilities
Baseball (official 90')	0
Little League (60') / Softball	4
Softball	0
Soccer / Football Lighted	4
Soccer Non-Lighted	0
Soccer Overlay on Ball field	4
Multi-Use Fields	0
Basketball	4
Volleyball	2
Tennis	4
Children's Play Areas	3
BMX Park	0
Roller Hockey	1
Skate Park	1
Dog Park	1
Picnic Ramada's	16
Restroom	3
Splash Pad	1
Swimming Pools	1
Community Center	1
Maintenance Facility	1
Amphitheater	0
Lake	0
Trail Head	1
Neighborhood Equestrian	0
Total Parking Needs	1,262 spaces





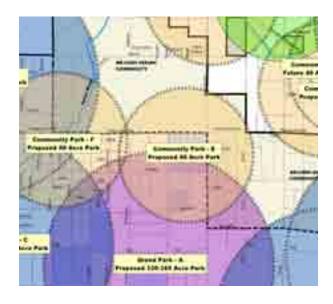


Community Park D

Community Park D, a 52 acre park site located in the central section of the City of Maricopa Planning area along the Santa Rosa wash to the south of the Maricopa-Casa Grande Highway. The park site should be located in the general area between Farrell Rd. on the north, Peters and Nall Rd on the South, White and Parker Rd. on the West and Fuqua Rd on the east. This park's location along the Santa Rosa Wash offers the opportunity to double as a flood control measure if needed. As the population increases to 178,992 residents, Community Park D will be needed to fulfill the needs of the community.

Table 13 Community Park D

Facility	# of Proposed Facilities
Baseball (official 90')	0
Little League (60') / Softball	4
Softball	0
Soccer / Football Lighted	2
Soccer Non-Lighted	0
Soccer Overlay on Ball field	4
Multi-Use Fields	0
Basketball	2
Volleyball	2
Tennis	0
Children's Play Areas	2
BMX Park	0
Roller Hockey	0
Skate Park	1
Dog Park	1
Picnic Ramada's	10
Restroom	2
Splash Pad	1
Swimming Pools	0
Community Center	0
Maintenance Facility	1
Amphitheater	0
Lake	0
Trail Head	0
Neighborhood Equestrian	0
Total Parking Needs	580 spaces



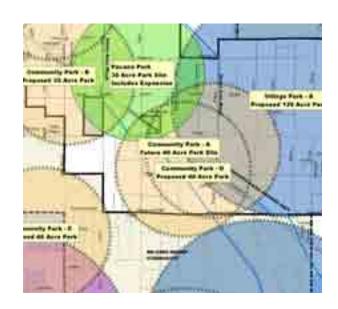
Community Park E

Community Park E, a 39 acre park site located in the central section of the City of Maricopa Planning area in near proximity to the southern edge of the Ak-Chin Indian Community. The park site should be located in the general area between Peters and Nall Rd. on the north, Papago Rd on the South, Green Rd. on the West and John Wayne Parkway on the east. As the population increases to 195,919 residents, Community Park E will be needed to fulfill the needs of the community.



Table 14 Community Park E

Facility	# of Proposed Facilities
Baseball (official 90')	0
Little League (60') / Softball	4
Softball	0
Soccer / Football Lighted	2
Soccer Non-Lighted	0
Soccer Overlay on Ball field	4
Multi-Use Fields	2
Basketball	4
Volleyball	2
Tennis	0
Children's Play Areas	2
BMX Park	1
Roller Hockey	0
Skate Park	0
Dog Park	1
Picnic Ramada's	10
Restroom	1
Splash Pad	1
Swimming Pools	0
Community Center	0
Maintenance Facility	1
Amphitheater	0
Lake	0
Trail Head	0
Neighborhood Equestrian	0
Total Parking Needs	608 spaces





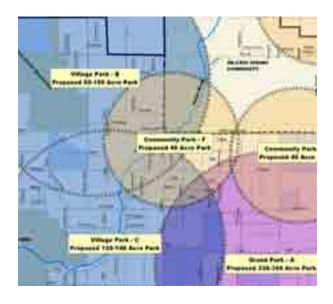
Community Park F

Community Park F, a 40 acre park site located in the eastern section of the City of Maricopa Planning area along the historic Vekol Wash. The park site should be located in the general area between Peters and Nall Rd. on the north, Papago Rd on the South, Ralston Rd. on the West and Brewer Rd on the east. The site currently houses a Rodeo Grounds and Volunteer Fire Department. This unique location offers the opportunity to tie a community park to Maricopa's historic roots. As the population increases to 211,678 residents, Community Park F will be needed to fulfill the needs of the community.



Table 15 Community Park F

Facility	# of Proposed Facilities
Baseball (official 90')	0
Little League (60') / Softball	0
Softball	0
Soccer / Football Lighted	0
Soccer Non-Lighted	0
Soccer Overlay on Ball field	0
Multi-Use Fields	5
Basketball	2
Volleyball	2
Tennis	0
Children's Play Areas	1
BMX Park	1
Roller Hockey	0
Skate Park	0
Dog Park	1
Picnic Ramada's	10
Restroom	1
Splash Pad	1
Swimming Pools	0
Community Center	0
Maintenance Facility	1
Amphitheater	0
Lake	0
Trail Head	1
Neighborhood Equestrian	1
Total Parking Needs	222 spaces



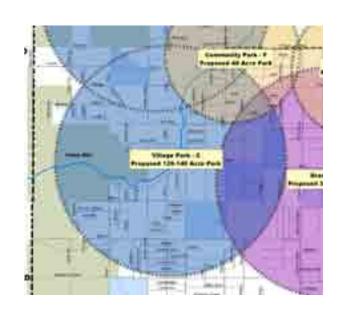
Village Park C

Village Park C, a 130 acre park site located in the eastern section of the City of Maricopa Planning area along the Vekol Wash. The park site should be located in the general area between Val Vista Rd. to the north, Miller Rd to the South, Hidden Valley Rd. to the West and Thunderbird Rd to the east. This parks close proximity to Haley Hills should reflect this location. Preservation of the rural character, while providing the necessary amenities for the growing population are critical aspects of this park. As the population increases to 267,599 residents, Village Park C will be needed to fulfill the needs of the community.



Table 16 Village Park C

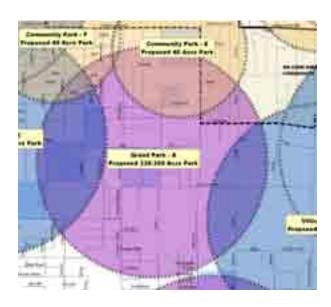
Facility	# of Proposed Facilities
Baseball (official 90')	0
Little League (60') / Softball	4
Softball	4
Soccer / Football Lighted	6
Soccer Non-Lighted	0
Soccer Overlay on Ball field	8
Multi-Use Fields	4
Basketball	4
Volleyball	4
Tennis	8
Children's Play Areas	4
BMX Park	1
Roller Hockey	1
Skate Park	1
Dog Park	1
Picnic Ramada's	20
Restroom	4
Splash Pad	1
Swimming Pools	0
Community Center	1
Maintenance Facility	1
Amphitheater	1
Lake	0
Trail Head	3
Neighborhood Equestrian	1
Total Parking Needs	1,571 spaces





Southlake Texas

City of Maricopa Land Use Plan



Grand Park A

Grand Park A, a 300 acre park site located in the central section of the City of Maricopa Planning area. The current land use plan has the area near this site as the commercial core of the City of Maricopa located south of the Ak-Chin Indian Community. The park site should be located in the general area between Val Vista Rd. to the north, Louis Johnson Rd on the South, Amarillo Valley Rd. on the West and Green Rd to the east. With the planned increase in population density and commercial activity around this park site a large multi-use park will serve as a key element to the future quality of life of the area. As the population increases to 394,619 residents, Grand Park A will be needed to fulfill the needs of the community.

Table 17 Grand Park A

Facility	# of Proposed Facilities
Baseball (official 90')	4
Little League (60') / Softball	8
Softball	8
Soccer / Football Lighted	16
Soccer Non-Lighted	0
Soccer Overlay on Ball field	20
Multi-Use Fields	10
Basketball	8
Volleyball	12
Tennis	12
Children's Play Areas	5
BMX Park	0
Roller Hockey	2
Skate Park	1
Dog Park	2
Picnic Ramada's	30
Restroom	6
Splash Pad	1
Swimming Pools	2
Community Center	2
Maintenance Facility	1
Amphitheater	1
Lake	1
Trail Head	1
Neighborhood Equestrian	0
Total Parking Needs	3,828 spaces

Village Park D

Village Park D, a 123 acre park site located in the western section of the City of Maricopa Planning area in near the current Nissan proving grounds. The park site should be located in the general area between Cow Town Rd. on the north, Miller Rd on the South, Stanfield Rd. on the West and Anderson on the east. As the population increases to 500,000 residents, Village Park D will be needed to fulfill the needs of the community.



Table 18 Village Park D

Facility	# of Proposed Facilities
Baseball (official 90')	0
Little League (60') / Softball	4
Softball	4
Soccer / Football Lighted	6
Soccer Non-Lighted	0
Soccer Overlay on Ball field	14
Multi-Use Fields	0
Basketball	4
Volleyball	4
Tennis	0
Children's Play Areas	3
BMX Park	1
Roller Hockey	2
Skate Park	1
Dog Park	1
Picnic Ramada's	16
Restroom	4
Splash Pad	1
Swimming Pools	1
Community Center	1
Maintenance Facility	1
Amphitheater	1
Lake	1
Trail Head	1
Neighborhood Equestrian	1
Total Parking Needs	1,742 spaces



Village Park E

Village Park E, a 112 acre park site located in the western section of the City of Maricopa Planning area in near the current Nissan proving grounds. The park site should be located in the general area between Miller Rd. on the north, Clayton Rd on the South, White and Parker Rd. on the West and Stanfield on the east. As the population increases to 447,461 residents, Village Park E will be needed to fulfill the needs of the community.

Table 19 Village Park E

Facility	# of Proposed Facilities
Baseball (official 90')	0
Little League (60') / Softball	4
Softball	4
Soccer / Football Lighted	6
Soccer Non-Lighted	0
Soccer Overlay on Ball field	8
Multi-Use Fields	0
Basketball	4
Volleyball	2
Tennis	8
Children's Play Areas	4
BMX Park	0
Roller Hockey	1
Skate Park	1
Dog Park	1
Picnic Ramada's	16
Restroom	4
Splash Pad	1
Swimming Pools	1
Community Center	1
Maintenance Facility	1
Amphitheater	0
Lake	1
Trail Head	1
Neighborhood Equestrian	0
Total Parking Needs	1,708 spaces

of Proposed



Community Park G

Community Park G, a 43 acre park site located in the southern section of the City of Maricopa Planning area adjacent to a BLM parcel which has the opportunity to be a special use park. The park site should be located in the general area between Wildwood Rd to the north, Fresno Rd on the South, Ralston Rd. on the West and Amarillo Valley Rd on the east. As the population increases to 466,113 residents, Community Park G will be needed to fulfill the needs of the community.



Table 20 Community Park G

Facility	# of Proposed Facilities
Baseball (official 90')	0
Little League (60') / Softball	2
Softball	0
Soccer / Football Lighted	2
Soccer Non-Lighted	0
Soccer Overlay on Ball field	4
Multi-Use Fields	1
Basketball	2
Volleyball	1
Tennis	2
Children's Play Areas	1
BMX Park	0
Roller Hockey	0
Skate Park	0
Dog Park	1
Picnic Ramada's	8
Restroom	1
Splash Pad	1
Swimming Pools	0
Community Center	0
Maintenance Facility	1
Amphitheater	0
Lake	0
Trail Head	1
Neighborhood Equestrian	1
Total Parking Needs	451 spaces



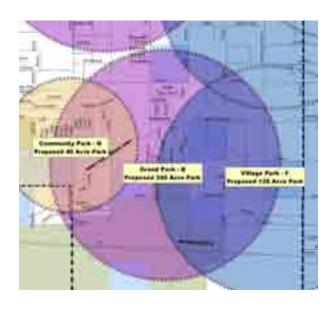


Grand Park B

Grand Park B, a 200 acre park site located in the southern section of the City of Maricopa Planning area is near a large parcel of BLM land which borders Interstate 8. The park site should be located in the general area between State Route 84 on the north, Interstate 8 on the South, Green Rd. on the West and Smith Rd. on the east. The unique location of this park site with its proximity to regional transportation corridors allows for the opportunity to create a regional sports complex. As the population increases to 556075 residents, Grand Park B will be needed to fulfill the needs of the community.

Table 21 Grand Park B

Facility	# of Proposed Facilities
Baseball (official 90')	2
Little League (60') / Softball	8
Softball	6
Soccer / Football Lighted	12
Soccer Non-Lighted	0
Soccer Overlay on Ball field	28
Multi-Use Fields	4
Basketball	8
Volleyball	12
Tennis	8
Children's Play Areas	4
BMX Park	0
Roller Hockey	4
Skate Park	0
Dog Park	1
Picnic Ramada's	24
Restroom	6
Splash Pad	1
Swimming Pools	1
Community Center	1
Maintenance Facility	1
Amphitheater	1
Lake	1
Trail Head	0
Neighborhood Equestrian	0
Total Parking Needs	2,804 spaces



Village Park F

Village Park F, a 120 acre park site located in the south-eastern section of the City of Maricopa's Planning area. The park site should be located in the general area between Peters Rd. on the north, Carranza Rd on the South, White and Parker Rd. on the West and Fuqua Rd on the east. As the population reaches build-out of 606,996 residents, Village Park F will be needed to fulfill the needs of the community.



Table 22 Village Park F

Facility	# of Proposed Facilities
Baseball (official 90')	0
Little League (60') / Softball	4
Softball	4
Soccer / Football Lighted	4
Soccer Non-Lighted	0
Soccer Overlay on Ball field	8
Multi-Use Fields	4
Basketball	4
Volleyball	4
Tennis	4
Children's Play Areas	3
BMX Park	1
Roller Hockey	0
Skate Park	1
Dog Park	1
Picnic Ramada's	16
Restroom	4
Splash Pad	1
Swimming Pools	1
Community Center	1
Maintenance Facility	1
Amphitheater	1
Lake	1
Trail Head	1
Neighborhood Equestrian	1
Total Parking Needs	1,568 spaces



Community Facilities

Located in community, village, urban or special use parks, or possibly as standalone facilities, but preferred within a park site are major community facilities such as community centers, aquatic centers and recreation/entertainment district/parks. These facilities provide community wide services, amenities and support economic development and growth of the city.

Community Centers

As community anchors, Maricopa's Community Centers will be public gathering places that convey a sense of community. The centers will provide recreation, library, meeting space, park and ride, police substations and satellite city hall type services. Specific uses may include:

- Recreation
 - Fitness Center
 - Gymnasium
 - Public Meeting Rooms
 - Rock Climbing Walls
 - Crafts Rooms
 - Running Track
 - Swimming Pool/Aquatic Center
- Library
 - Traditional Book Stacks
 - Children's Library
 - Periodical
 - Archives
 - Computer and Digital Commons
 - Public Meeting Rooms
 - Conference Center

- Community Uses
 - Senior's Center
 - Dinning Hall/Kitchen
 - Children's Program Facilities for Before/After School, Summer and Intersession, etc.
- Community Services
 - Police Substation
 - Fire Station
 - Bill Pay Drop
 - Planning/Development Offices
 - Mini-City Hall
 - Park and Ride

These centers will be landmark architectural statements that convey Maricopa's community image. The rich agricultural heritage of Maricopa provides an excellent architectural form and materials for these centers themes. Use of barns, granaries and cotton gin forms, materials and scale can be a vernacular appropriate to Maricopa and the agricultural heritage of the area.





Aquatic Centers

Aquatic centers can be stand alone facilities or built in conjunction with community centers. The aquatic centers should be themed to provide a unique experience for the users. Potential uses include:

- Lap Pool
- Diving Pool
- Zero Edge/Beach Entry Pool
- Splash Pad
- Wave Pool
- Lazy River
- Plunge Areas
- Slides
- Sun Decks and Sun Lawns



A concept for development around Community Parks B, Village Park A and Village Park C is "Recreation/ Entertainment Districts". The intent is to develop these parks as intense active recreation uses such as soccer, football, softball and baseball complexes that are adjacent to privately developed hotel/restaurant/retail areas that would serve the community and event/tournament users. These districts/parks would be unique economic engines for the city attracting major events and tournaments bringing in outside visitors and participants.



Special Use Parks

A Special Use Park is dedicated to specific or single purpose recreational activities such as golf, nature centers/preserves, equestrian staging areas, amphitheaters, or sports complexes, in addition to recreation centers that provide a variety of special events and activities. Their purpose is to enhance the multi-use year-round recreational opportunities for residents of the City of Maricopa. Special uses generally fall into the categories below:

Historic/cultural/social sites: unique local resources offering historical, educational, and cultural opportunities. Examples include archeological areas/sites, historic downtown city areas, performing arts parks, arboretums, ornamental gardens, performing arts facilities, indoor theaters, churches, public buildings, and amphitheaters.

- Recreation Facilities: specialized or single-purpose facilities, including community centers, senior centers, community theaters, hockey arenas, golf courses, and aquatic parks. Community buildings are often located in Special Use and Community Parks.
- Outdoor recreation facilities: Examples include tennis centers, softball complexes, and sports stadiums.
- Open Space/Mountain preserves/Natural preserve/Conservation
- Pocket Parks
- River/Wash corridors
- Floodplains and drainage ways
- Linear Open Spaces
- Canals
- Power lines
- Railroad corridors
- Community gardens
- Model Airplane Parks
- Rodeo/Equestrian centers
- Cemeteries
- Historic or Cultural Sites

Table 23 Existing Special Use Parks

Special Use Park	Existing
Rotary Park (Privately Owned)	1
Jane Askew Memorial Park (County Owned)	1
Total	2







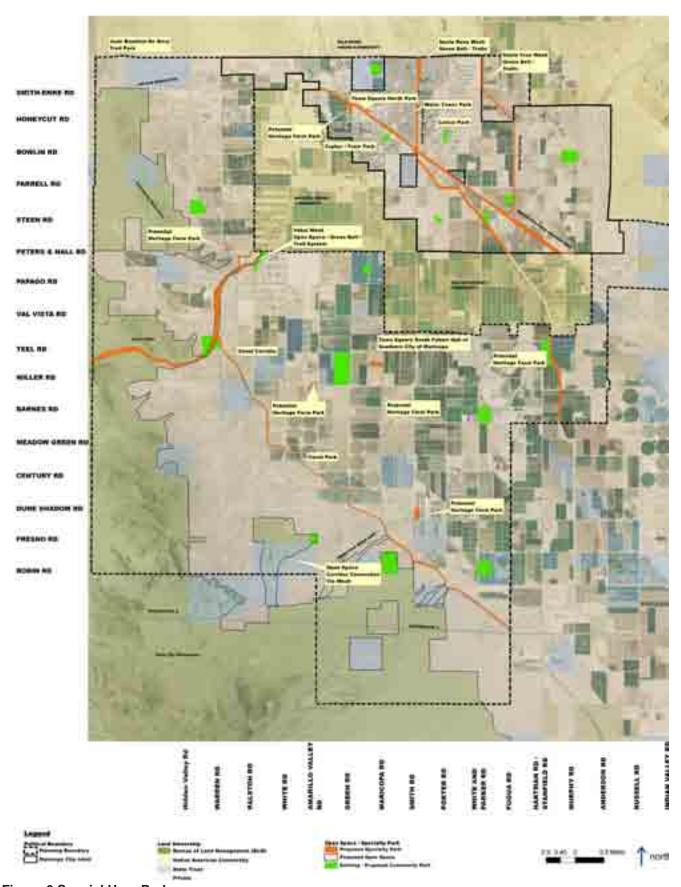


Figure 6 Special User Parks







Proposed Special Use Parks

Railroad Heritage Park

The Railroad has a deep seeded history in the City of Maricopa. Several remnants of railroad history are intact adjacent to the railroad tracks. These include an observation car from the California Zephyr train and the Old Railroad Water Tower is located adjacent to the tracks at the intersection of the Maricopa-Casa Grande Highway and John Wayne Parkway Highway. These two icons of the railroad heritage along with a linear park adjacent to the rail would provide a landmark park for Maricopa. Other potential features in the park include: recreated train station which could serve as a chamber of commerce and information center, paths, observation decks, additional restored train cars and engines, children's railroad park with a scale train, and a highway rest area.

Farmstead Heritage Parks

Throughout the planning area are several farmsteads that include homes, barns, out-buildings, storage bins, hay pole barns, cotton gins, cultivated fields, canals, orchards and windbreaks. As agricultural uses are displaced with development, these sites could serve the community from a historical reference as well as provide a pleasant setting. Protection and acquisition of some of these sites is recommended to preserve the agricultural history of the area. Potential uses include repurposing the buildings for community meeting rooms, picnic pavilions, museums, and working history exhibits. In addition the farm grounds, fields and orchards could be preserved for community gardens and working history exhibits. Other potential uses are day or night camps for children, farm equipment club meetings and events and community agricultural/food themed events and festivals such as pecan, dates, corn, grapes, wine and cheese, culinary, etc.

Santa Rosa Wash

The vision for the Santa Rosa Wash is verdant corridor that residents can walk or bike through via access from their neighborhoods or parking lots at arterial roads. The site would include recreation activities such as picnicking, open multi-use turf, dog parks, basketball courts, and children's playgrounds located along the way. The wash will continue to serve as a storm water conveyance but will be transformed into a community multi-use area. The wash is a critical corridor for multi-use paths and trails and is vital in providing a connected off-street pedestrian and bicycle network.

The Santa Rosa Wash runs from the southeast portion of Maricopa north/northwest through the city into the Ak-Chin Indian Community then back into the city and ultimately exiting the northern boundary into the Gila River Indian Community. With the ownership transitioning from city to Ak-Chin Indian Community and back to the city, this will require a partnership between the city and the Ak-Chin Indian Community to provide a continuous connected corridor. The wash is an existing earthen channel for the majority of its length with a few improvements, private golf course and landscape in the northern reach through the Rancho Eldorado development, while the remainder of the washes reaches are not yet improved. The opportunity for a linear open space abounds through the corridor. Access from adjacent neighborhoods and at arterial road crossings will be key to the success of the washes recreation potential. Existing neighborhoods will require coordination with the home owners associations and residents to determine access points and what recreational uses will be needed.

Santa Cruz Wash

The vision for the Santa Cruz Wash is very similar to the Santa Rosa Wash as a verdant corridor that residents can walk or bike through by accessing from their neighborhoods or parking lots at arterial roads with recreation activities such as picnicking, open multi-use turf, dog parks, basketball courts, and children's playgrounds located along the way. The wash will continue to serve as a storm water conveyance but will be transformed into a community multi-use area. The wash is a critical corridor for multi-use paths and trails and is vital in providing a connected off-street pedestrian and bicycle network.

The Santa Cruz Wash also runs from the southeast parts of Maricopa north/northwest through the city into the Ak-Chin Indian Community then back into the city and ultimately exiting the city's north boundary into the Gila River Indian Community. With the ownership transition from city to Ak-Chin Indian Community and back to the city requires a partnership between the city and the Ak-Chin Indian Community to provide a continuous connected corridor. The wash is an existing earthen channel along its length. The entire corridor of the wash is not yet improved and has not been graded to their final cross-section and size. The opportunity for a linear open space abounds through the corridor. Access from adjacent neighborhoods and at arterial road crossings will be key to the success of the washes recreation potential. Most of the existing neighborhoods along the wash have embraced the wash as an open space and have walk-in access. Additional public walk-in and drive-in access will be needed.

Vekol Wash System

The vision for the Vekol Wash System is very similar to the Santa Rosa and Santa Cruz Washes as a corridor that residents can walk or bike through by accessing from their neighborhoods or parking lots at arterial roads with recreation activities such as picnicking, equestrian riding and children's playgrounds located along the way, the character of the wash would be native desert landscape. The wash will continue to serve as a storm water conveyance but will be transformed into a community multi-use area. The wash is a critical corridor for multi-use paths and trails and is vital in providing a connected off-street pedestrian, equestrian and bicycle network.

The Vekol Wash also runs from the central western parts of Maricopa north/northeast through the city into the Ak-Chin Indian Community then back into the city and ultimately exiting the city's northern boundary into the Gila River Indian Community. The wash is an existing earthen channel or native wash along its length. The entire corridor of the wash is not yet improved and has not been graded to their final cross-section and size in the areas of channelization. The opportunity for a linear open space abounds through the corridor. Access from adjacent neighborhoods and at arterial road crossings will be key to the success of the washes recreation potential. Much of the corridor's adjacent lands have either not been developed or are large lot (3 acre plus) residential. Access to the wash open space should have both walk-in and drive in access.









Mountain Park(s)

Along the western and southern edges of Maricopa's planning area are large areas of mountain lands predominantly owned by the BLM with some private and ASLD ownership. These mountains provide an incredible opportunity for the city to have a mountain preserve open space park(s). The mountains are comprised of the Palo Verde Mountains in the northwest edge, the Haley Hills in the southwest edge and the Table Top Mountains in the south edge. The vision for the Mountain Parks is the creation of a special use mountain preserve park(s) system with trails, trailheads, picnic areas and environmental education centers located to provide public access to the mountain preserve(s). This would be a similar system to the City of Phoenix Mountain Parks and Preserves.

The BLM provides a good partnership for teaming or land acquisition via the PR&P for a majority of the mountain park(s). Private and ASLD lands may need to be purchased or set aside through "normal" city development and zoning requirements such as hillside protection.



Juan Batista de Anza Trail/Trailhead Park

Maricopa is lucky to have such a significant regional 1200 mile long national historic trail corridor running through the northwest portion of the city planning area. The intent is to create a special use park and trail head on BLM land north of State Route 238 just east of the county line. Below is an excerpt from the National Park Service web site http://www.nps.gov/juba/.

The Juan Bautista de Anza National Historic Trail is a 1,210-mile historic route from Nogales, Arizona to San Francisco, California. The trail commemorates the story of the 1775-1776 Spanish Expedition whose members, consisting of some 30 families, experienced this overland route on their trek to Alta (or upper) California. They founded and established the Mission and Presidio of San Francisco, the Mission in Santa Clara and the Pueblo of San José. Most settled in what is today the San Francisco Bay Area.

The Juan Batista de Anza Trail/Trailhead Park would be a place to discover and interpret the history of the trail and be a launch point for traversing the trail. This park/trailhead could be a regional tourist attraction as well as local draw. Sited adjacent to BLM and Gila River Indian Community land the site has unimpeded open views across sonoran desert and up to the Estrella Mountains.

Gas Line Corridor

A natural gas pipeline corridor cuts across the mid section of the city and affords a great linear corridor for multi-use paths and trails. By locating trailheads and access nodes to the future adjacent neighborhoods the residents will be able to use this cross city path and trail corridor and connect into the greater city wide system.

Power Line Corridors

Several power line corridors cut across the city providing additional linear corridors for multi-use paths and trails. By locating trailheads and access nodes to the future adjacent neighborhoods the residents will be able to use this cross city path and trail corridor and connect into the greater city wide system.



Juan Batista de Anza Trail

- 1,200+ mile long national historic trail corridor from Nogales, Arizona to San Francisco, California.
- Commemorates 1775-1776 Spanish Expedition
- Opportunity for the City of Maricopa to establish trailhead and interpretive center
- Opportunity for the City of Maricopa to establish a gateway to the BLM Land.





Canal Park

Bisecting the southwestern part of the city's planning area is a large canal. This regional corridor connects into Casa Grande's planning area providing a regional path and trail connection. The canal corridor links the mountains and Vekol Wash System on the western edge of the city, several community parks and open spaces as it reaches east. Proposed amenities would be a paved multi-use path on the north bank of the canal and an un-paved trail on the south bank with trailheads and neighborhood access nodes per the master plan.



Town Square Park

This will become an urban core for the city which will be a community wide draw. To provide a truly "hometown" feel and amenity this plan proposes a "Town Square Park" in the manner of great American community planning traditions. The Town Square Park would provide a "heart" of the city and be the city's living room surrounded by commercial and civic buildings. While serving as a community as a community gathering place and creating a sense of place, the town square would also be an event space that could host; farmers markets, art fairs, culinary festivals, etc. Facilities in the park would be; a landmark fountain and art piece, a "grand lawn", community pavilion/amphitheater, public comfort stations, etc. The Town Square Park would be one of the "Chamber of Commerce" photo-opps and a city land mark.



Ordinance Opportunity

Development retention basins land may be dedicated to the city as a park site. The development agreement must be agreed to by the parks and recreation department.

- 1. Require developers to provide a park site master plan that is approved by the City of Maricopa parks department, planning department and city council, or provide fees in lieu of.
- 2. Area must be a minimum of 20 contiguous acres with no lot width dimension less than 660'.
- 3. Dry wells must be provided that achieve the current storm water evacuation requirements.
- 4. Side slopes must not exceed 6:1 slope.
- 5. 25% of site must be above 100 year storm retention level.
- 6. Storm water velocities must not exceed 3ft/sec.
- 7. Development will provide site grading to the agreed upon final grades based upon an approved park site master plan.

Park use is considered "public" open to all citizens of the City of Maricopa.

Paths and Trails

Paths, trails, sidewalks and their associated amenities are the connective, non-motorized transportation and recreation corridors that tie the city's neighborhoods to each other, as well as providing linkages to local and regional destinations such as the Santa Rosa, Santa Cruz and Vekol Washes, mountains, downtown City of Maricopa, parks, schools, open spaces, shopping areas, and employment centers. This chapter provides guidelines and standards for typical unpaved trails, paved paths, enhanced pedestrian facilities, trailheads, access points, and path and trail road and other crossings. As this document provides detailed information only for non-motorized paths and trails and their associated amenities, this document provides does not provide standards and guidelines for on-street bicycle routes or bicycle lanes. However, these specifications have been implemented in other City planning and transportation documents.

All facilities are recommended to be shared or multi-use. Path and trail surface material tends to be self-selecting for the type of use that will be attracted to either a path or a trail. For instance, in-line skaters prefer paved surfaces and equestrians prefer unpaved surfaces. The paths and trails are generally located within parks, open space areas, along drainage features, canals, railroad corridors, utility corridors, and adjacent to roads. They are located and designed for all types of users with various levels of abilities. Paths and trails provide the backbone for major non-motorized corridors. However, neighborhood scale non-motorized connectivity relies upon the network of sidewalks. Trailheads and access points are located so as to maximize resident's ability to easily and safely access the path and trail system. Enhanced crossings along path and trail routes will minimize users' potential conflicts with vehicles and improve user safety and comfort.



How to become a bicycle friendly community

- Adopt a target level of bicycle use (e.g. percent of trips) and safety to be achieved within a specific timeframe, and improve data collection necessary to monitor progress.
- 2. Provide safe and convenient bicycle access to all parts of the community through a signed network of on- and off-street facilities, low-speed streets, and secure parking. Local cyclists should be involved in identifying maintenance needs and ongoing improvements.
- 3. Establish information programs to promote bicycling for all purposes, and to communicate the many benefits of bicycling to residents and businesses (e.g. with bicycle maps, public relations campaigns, neighborhood rides, a ride with the Mayor)
- 4. Make the City a model employer by encouraging bicycle use among its employees (e.g. by providing parking, showers and lockers, and establishing a city bicycle fleet).
- 5. Ensure all city policies, plans, codes, and programs are updated and implemented to take advantage of every opportunity to create a more bicycle-friendly community. Staff in all departments should be offered training to better enable them to complete this task.
- 6. Educate all road users to share the road and interact safely. Road design and education programs should combine to increase the confidence of bicyclists.
- 7. Enforce traffic laws to improve the safety and comfort of all road users, with a particular focus on behaviors and attitudes that cause motor vehicle/bicycle crashes.
- 8. Develop special programs to encourage bicycle use in communities where significant segments of the population do not drive (e.g. through Safe Routes to Schools programs) and where short trips are most common.
- 9. Promote intermodal travel between public transport and bicycles, e.g. by putting bike racks on buses, improving parking at transit, and improving access to rail and public transport vehicles.
- 10. Establish a citywide, multi-disciplinary committee for nonmotorized mobility to submit to the Mayor/Council a regular evaluation and action plan for completing the items in this Charter.

Bike Friendly Community

The League of American Bicyclists has established a set of guidelines for a city to be designated "Bike Friendly". As the City of Maricopa is a new growing city it is in a unique position to promote alternative modes of transportation within the city limits. The Paths and Trail system detailed within this document is intended to work in tandem with the regional automotive transportation system. Current engineering standards for the City of Maricopa require bicycle lanes and crossings on new roads within the City of Maricopa. This in combination with the proposed paths and trails network will enable a non-motorized transportation system throughout the City of Maricopa. The advantages of becoming a Bike Friendly City include a higher quality of life for residents, tourism opportunities, decreased automotive use (along with the associated issues) and can increase property values. Other cities within in Arizona that have earned the designation "Bike Friendly" include: Tucson, Chandler, Gilbert and Mesa.

A key component of becoming a bicycle friendly city is the enforcement of existing traffic and safety regulations. A system that has a safe feel to it will encourage members of the community to ride bicycles. The City of Maricopa has the opportunity to apply for official status as a "Bicycle Friendly City" and receive a ranking of gold, silver or bronze. A successful bicycle system will gain the City of Maricopa notoriety and spur future events within the city. Many cities have used this as part of the marketing strategy for their city.



Juan Bautista de Anza National Historic Trail

A portion of the Juan Bautista de Anza National Historic Trail passes through the North-western edge of the City of Maricopa's planning area. This 1200 mile trail commemorates a Spanish colonial expedition between 1775 and 1776. This was the first overland route established to connection "New Spain" with San Francisco. A trailhead proposed trailhead will connect the City of Maricopa's trail system to this historic landmark.

Associated Trail Plans

As shown in Figure ### the City of Maricopa's paths and trail system has been integrated with existing trail plans including:

- City of Casa Grande Regional Trail System
- Pinal County Open Space and Trails Master Plan
- Table Top Wilderness Trail Plan

Connections have been provided to enable trail users to connect to adjacent trail system allowing for an integrated system. These connections include a paved path which connects to the existing table top wilderness, a secluded back country trail with a peak of 4,373 feet.







City of Casa Grante Regional Trail System Plan

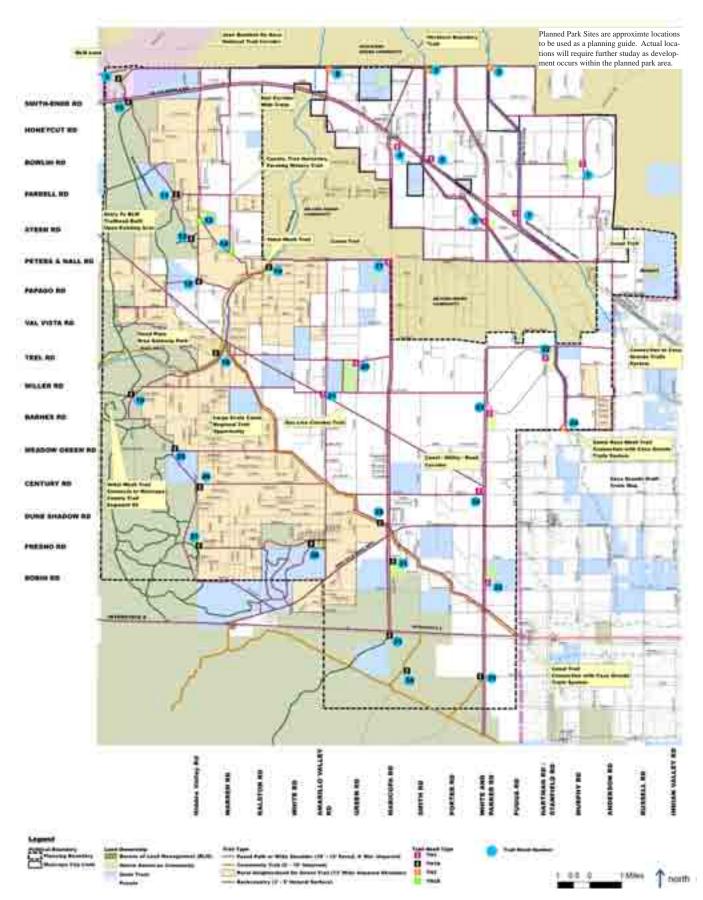


Figure 7 Proposed Paths and Trails

Paved Paths with Wide Shoulder

These are the predominant type of trail within the proposed system. These are used throughout the planning area to connect landmarks, parks and open space areas. These provide dual surface materials accommodating a diverse group of users. For the paved portion of the path the preferred surface material is concrete, however asphalt is acceptable. This paved facility is used by bicyclists, pedestrians, joggers, strollers, wheelchair users, in-line skaters, other non-motorized users, and anyone wanting a smooth and consistent surface. The unpaved shoulder adjacent to the paved path should be a minimum of 4' wide and is designed to accommodate users who prefer a softer surface.

Paths are signed for various users, are ADA accessible (when less than 5% grades) and may also be used by small maintenance and emergency response vehicles. Standards may vary within American Association of State Highway and Transportation Officials (AASHTO) guidelines according to Right-of-way (ROW) width, existing or anticipated level of use, geographical and environmental constraints, and land uses. The typical minimum Paved Path width is 10′. In areas of steep terrain, limited visibility, high existing or anticipated levels of use and/or areas with a great variety of users, the minimum width should be 12′.

The paved path system includes regional and local connections. The system of Paved Paths provides a variety of loops that connect neighborhoods to all types of destinations and unpaved trails. AASHTO guidelines provide details for horizontal alignment, sight distance, path-roadway intersection signing and marking, lighting and other specific recommendations not identified in the table below.

The Paved Path with 4' shoulder was used in situations that met at least one of the following situations warranted this classification:

- Anticipated dominant use in the corridor would be on a Paved Path, but some level of unpaved trail use would also be likely.
- Paved Path and Unpaved Trail use is expected, by corridor width limitations prohibit separate facilities.
- The wide Unpaved Shoulder would complete a loop comprised of other Unpaved Trails.
- 1. Recent studies by AASHTO (American Association of State Highway and Transportation Officials) suggest possible safety and site circumstances that may justify lessening the width of Side Paths to below 10'. Greater widths should be considered in response to substantial use by bicycles, joggers, skaters and pedestrians, use by large maintenance vehicles, and/or steep grades.
- 2. Anything above 5% is not considered accessible per ADA. Grades above 5% should only occur where terrain dictates.



Figure 8 Paved Path with Wide Shoulder Section



Unpaved Trails

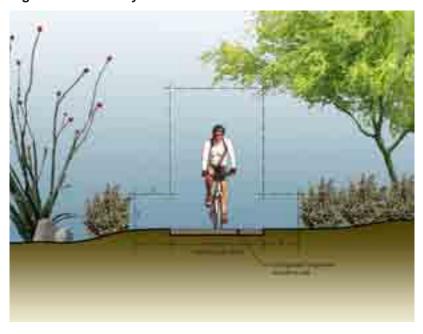
This facility consists of an unpaved corridor used by non-motorized multiple user groups such as mountain/recreational bicyclists, walkers, runners, hikers, equestrians and others who prefer a soft, natural surface rather than a hard paved surface. Though the trails accommodate a variety of uses, there are nationally recognized "yield to" rules that promote safe and courteous use of the trails. All users "yield to" equestrians and bicyclists also yield to the hiker/walker.

The system of unpaved trails includes those with a regional scope as well as trails that connect various neighborhoods to the larger trail network, and include Back Country, Community and Neighborhood Equestrian trails. Levels and types of use are the biggest determinant for which type of trail is located along a particular corridor. In general, Community Trails are anticipated to accommodate greater quantities and types of users than Neighborhood Equestrian or Back Country Trails.

Community Trails

Two community trails have been planned within the City of Maricopa Planning Limits both of which are located in situations that did not warrant multiple paved paths. Both trails have the possibility for a large amount of equestrian use from the surrounding development and the establishment of these community trails separate from the Paved Paths will allow the different types of users to coexist.





Back Country Trails

These trails are located within preserved open space or mountainous, non-developed, or protected areas such as the Haley Hills and Palo Verde Mountains. They are built with greater sensitivity to the existing natural environment and are therefore narrower than trails in developed parts of the City. These afford the user to explore the Sonoran Desert while limiting the visitor's impact on the vegetation and habitats within the area.

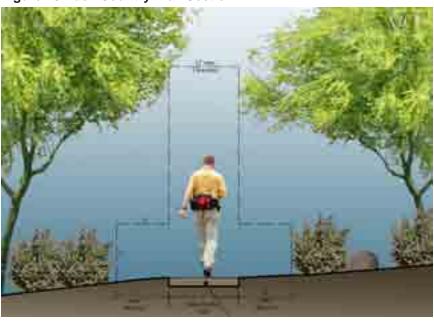


Figure 10 Back Country Trail Section

Rural Neighborhood On Street Trails

These trails are provided adjacent to neighborhood and collector roads/streets in the large lot low density areas of the community to maintain the equestrian heritage of these neighborhoods.

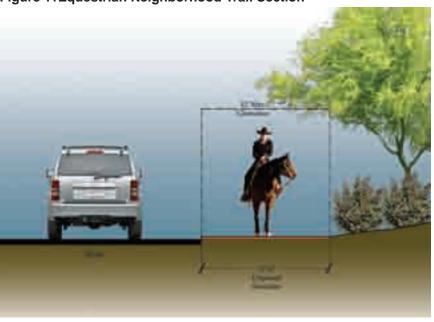


Figure 11 Equestrian Neighborhood Trail Section

Trailheads (TH)

Trailheads are located along all types and levels of trail and path corridors. They provide drive-in as well as non-vehicular access to local and regional destinations and open space areas. There are four levels of proposed standard Trailheads, two with equestrian parking and amenities: TH1-E and TH2-E; and two without: TH1 and TH2. TH1-E and TH1 have more parking spaces and amenities than TH2-E and TH2. They can be located within neighborhood or community parks or built as separate facilities (see table 24).

Table 24: Trailhead Standards

Access Level	Quantity	Size	Parking Spaces	Restrooms
Entry Node	1/4 mile Intervals	.02 acres +/-	None	None
TH1	1	4 acres	31-60 std.	Yes
TH2	4	3 acres	16-30 std.	Yes
TH1-E	6	6 acres	31-60 std. +10-15 Equestrian	Yes
Access	1 Shade			

Access Level	1 Shade Structure	Optional	Yes	None
Entry Node	1 Shade Structure	Optional	Yes	Yes, when along an unpaved trail
TH1	3-4 Single	Yes	Yes	None
TH2	2 Single	Yes	Yes	None

				Yes, plus ADA
	4 single			mounting ramp
	(Locate			or platform,
TH1-E	2 Near	Yes	Yes	manure
	Equestrian			disposal area,
	Facilities)			1 round pen, 1
				wash rack

TH2-E	2-3 Single (locate 1 near Equestrian Facilities)	Yes, Optional Arena Lighting	Yes	Yes, plus ADA mounting ramp or platform, manure disposal area, 1 round pen, 1 wash rack
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^{1.} Parking spaces for trailheads are in addition to number of required parkig spaces for combined park sites.

^{2.} Equestrian parking requirements: 12'min width, 15' preferered x 60' min length, 70' preferred.

Standard Trailheads (TH1 and TH2)

The Standard Trailheads provide trail and path users with convenient parking, informational signage, and other amenities. Features common to all Standard Trailheads include:

- Paved parking
- Picnic ramadas
- Trail maps, information and regulations
- Restrooms
- Shade

Trailheads with Equestrian Facilities (TH1-E and TH2-E)

The Trailheads with Equestrian Facilities are intended to provide features for equestrian uses as well as other trailhead parking and amenities. These facilities would be located along all classifications of Unpaved Trail corridors. Features common to all Trailheads with Equestrian Facilities include:

- 1/4" minus decomposed granite for equestrian parking and off-loading areas
- Separation of equestrians from other users in parking and trail access
- Perimeter fencing and self-closing gates at pedestrian and trail entrances near streets
- Pull-through, circular roadway and parking areas





Access Points

There are several types of improved access points which will greatly enhance safety and user experiences. Most importantly, the overall success of a trail/path system largely depends on the ease with which people can access the facilities, either by walking, riding or biking from home or by driving to convenient, safe, and well-equipped trailheads.

Entry Nodes

Entry nodes are developed access areas along all types of path and trail corridors that serve to encourage and welcome neighborhood and local access to the path/trail system. They should be located at approximately ½ mile intervals along corridors, a distance typically cited as a reasonable walking distance to a destination. Entry Nodes do not include parking facilities. Because there would be numerous nodes using this spacing recommendation, they are not shown on the map; however, numerous opportunities exist to meet the quarter mile spacing. The illustration below (figure 12) shows how street edges, parks, schools, and even commercial sites can be used to activate the path or trial corridor through numerous entry nodes.

Nodes include amenities to improve comfort and provide helpful information to users such as benches, signs, water, shade, bike racks, and optional lighting. Site specific designs can also create or enhance neighborhood identity, incorporate public art and/or provide cultural or environmental interpretation opportunities. See graphic below for more information.

Figure 12 Entry Nodes

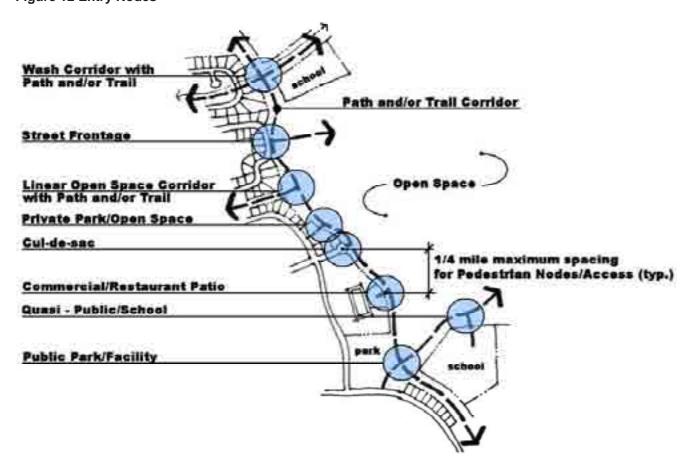


Table25: Trailhead Summary

Trailhead Number	Туре	General Location	Provides Access To?	Within a Park, Park and rider or Transit Corridor
1	TH1	Murphy Rd and Bowlin Rd	Access to loop path	Park: Proposed Community Park 4
2	TH2	Santa Cruz Wash and Northern Boundary of the City of Maricopa	Access to loop path and Santa Cruz Wash Corridor	No
3	TH2	Santa Rosa Wash and Northern Boundary of the City of Maricopa	Access to loop path and Santa Rosa Wash Corridor	No
4	TH1	John Wayne Parkway south of Maricopa Casa Grande Hwy	John Wayne Pkwy and Maricopa Casa Grande Hwy corridors	Park: Proposed Community Park 3
5	TH1	Santa Rosa Was and Maricopa Casa Grande Hwy	Santa Rosa Wash Corridor and Maricopa Casa Grande Hwy	No
6	TH1	Steen Rd and White and Parker Rd	Santa Rosa Wash Corridor and White and Parker Rd Corridor	Park: Proposed Community Park 9
7	TH1	Santa Cruz Wash and Maricopa Casa Grande Hwy	Santa Cruz Wash Corridor and Maricopa Casa Grande Hwy	Park: Proposed Community Park 2
8	TH2	Rachael Rd and Northern Maricopa Boundary	Loop Trail	No
9	TH1E	North of SR238 Northwestern corner of the Maricopa Planning Area	Juan Bautista de Anza National Historic Trail	No
10	TH1E	South of SR238 in the Northwestern corner of the City of Maricopa Planning Area	Palo Verde Mountains - BLM Land	No
11	TH1E	Farrell Rd. and the Palo Verde Mountains	Proposed Canal Trails and Palo Verde Mountains.	None
12	TH2E	Intersection of Hidden Valley Rd. and Steen Rd.	Canals and Hidden Valley Rd. Corridor	Park: Proposed Community Park 6
13	TH1E	West of Hidden Valley Rd and South of Steen Rd	Provides Connectivity to canal trails and Palo Verde Mountains	No
14	TH2E	Intersection of Warren Rd and	Provides Connectivity to Canals trail and	No
15	TH1E	Intersection of Hidden Valley Rd and Papago Rd.	Connectivity to between Vekol Wash and Canal Trail	No
16	TH1E	Intersection of Peters and Null Rd and Ralston Rd.	Vekol Wash	Park: Proposed Community Park 10
17	TH1	John Wayne Parkway and Peters and Nall Rd	Connectivity to canal and John Wayne Parkway corridors	Park: Proposed Community Park 7
18	TH1E	Intersection of Teel Rd and Warren Rd	Convergence of several trails in western Maricopa: Vekol Wash, Gas Line Corridor, Canal Corridor	Park: Proposed Community Park 11
19	TH1E	Desert Valley Rd and BLM Land in the Haley Hills area	Connectivity to Vekol Wash and Back Country Trails within BLM land.	Specialty Park - BLM
20	TH1	Teel Rd and Green Rd	Connectivity to proposed commercial hub of southern Maricopa	No
21	TH1	Amarillo Valley and Louis Johnson	Connectivity to proposed commercial hub of southern Maricopa	No
22	TH1	Teel Rd and Stanfield Rd	Santa Rosa Wash Corridor	Park: Proposed Community Park 14
23	TH1	White and Parker Rd and Luis Johnson Rd	White and Parker Rd Corridor	Park: Proposed Community Park 13

Trailhead Number	Туре	General Location	Provides Access To?	Within a Park, Park and rider or Transit Corridor
24	TH2	Santa Rosa Wash and Meadow Green Rd	Access to Santa Rosa Wash and connectivity with the City of Casa Grande Trail System	No
25	TH1E	Meadow Green Rd and Sage Rd.	Access to Back Country Trails and Meadow Green Rd. Corridor	No
26	TH1E	Intersection of Century Rd and Hidden Valley Rd.	Access to Back Country Trails and Century Rd. Corridor	No
27	TH1E	Intersection of Fresno Rd. and Hidden Valley Rd	Access to Back Country Trails and Fresno Rd. Corridor	No
28	TH1E	Intersection of Amarillo Valley and Fresno Rd.	Amarillo Valley Rd Corridor and Wash Corridor Trails	Park: Proposed Community Park 15
29	TH1E	Intersection of SR84 and John Wayne Parkway	Connectivity to Canal, SR84 and John Wayne Parkway Trail Corridors	No
30	TH1	Clayton Rd and White and Parker Rd	Access to canal, utility and road corridors	No
31	TH1E	Intersection of John Wayne Pkwy and Peters Rd	John Wayne Pkwy Corridor	Park: Proposed Community Park 16
32	TH1	Selma Rd and White and Parker Rd	Access to canal, utility and road corridors	Park: Proposed Community Park 17
33	TH1E	South of I8 within BLM land	Connectivity to Table Top Mesa	No
34	TH1E	South of I8 within BLM land	Connectivity to Table Top Mesa	No
35	TH1E	Connelly Rd and White and Parker Rd	Access to BLM land and road corridors	No

Crossings

A critical aspect of any non-vehicular path and trail system that interfaces with the street, drainage, utility and canal infrastructure is the treatment of crossings. The points at which paths and/or trails overlap or intersect with streets, canals, washes and utility corridors pose a great safety concern, and thus require special attention.

The Plan identifies two general crossings types:

- Grade-Separated Crossings
- Enhanced At-grade Crossings

These are further subdivided into various types of grade-separated and enhanced at-grade crossings.

Grade-Separated Crossings

Grade-Separated crossings such as bridges or culverts are the preferred crossing type because Path and Trail users are physically separated from roadway traffic or other potentially hazardous conditions at railroads, canals or rivers/washes. Whenever possible, Paths and Trails should be routed to where bridges or culverts already exist to eliminate at-grade crossings. There are also several other types of grade-separated crossings. The following information provides guidance on the critical design elements of all types of grade-separated crossings.

Bridge Underpass

When a trail or path passes under a bridge for a road or railroad track (such as along a wash), the following standards apply:

- Minimum 12' vertical clearance
- Minimum 12' width plus path or trail clearance standards
- Continuous, all day lighting under bridge (safety requirement)
- Multi-use trail/path signage at both ends including Trail Etiquette Signs
- Trail/path above the low-flow channel to minimize maintenance and maximize usability
- All applicable ordinances/requirements for ADA accessibility





Paths and Trails

- Many of the paths and trails are already established corridors.
- Paths and Trails provide a connected multi-modal network that promotes both pedestrian and non-motorized circulation.

Pedestrian Underpass

Where a trail/path passes under a road, canal, or railroad in a separate structure like a culvert or a tunnel, the following standards apply. This is a structure exclusive to path/trail and drainage use (except emergency and maintenance vehicles) and does not include a roadway.

- Minimum 12' vertical clearance
- Minimum 12' width plus path or trail clearance standards
- As close to perpendicular as possible to minimize length
- Continuous, all day lighting
- Air/light tunnel when as long as the width of a four-lane road
- Continuous sightline distance from beginning to end
- Multi-use trail/path signage at both ends including Trail Etiquette Signs
- Trail/path above the low-flow channel to minimize maintenance and maximize usability

Shared Bridge

Where a trail or path shares a bridge with vehicles, the bridge width should be increased on one side of the bridge to accommodate the trail or path. The following standards apply:

- Minimum 12' vertical clearance
- Minimum 12' width
- Lighting
- Vertical separation between trail/path and traffic, such as a jersey barrier
- See-through, continuous sides and tops around trail/path for maximum safety
- Multi-use trail/path signage at both ends of bridge including Trail Etiquette Signs

Pedestrian Bridge/Overpass

In cases where a special bridge that accommodates pedestrians, bicyclists or equestrians crosses over a road, canal, creek or drainage, the following standards apply:

- Minimum 12' vertical clearance
- Minimum 12' width
- Lighting
- See-through, continuous sides and tops around trail/path for maximum safety
- Multi-use trail/path signage at both ends including Trail Etiquette Signs



Enhanced At-grade Crossings

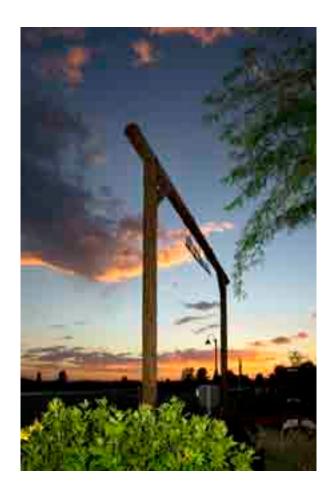
Where opportunities for grade separated crossings are limited or nonexistent, or where heavy equestrian traffic is expected, special design consideration can be made for at-grade crossings. Special trail crossing treatments can create a greater sense of security, comfort, and convenience for equestrians, as well as all users. These treatments are considerably less costly than grade-separated crossings and provide a greater opportunity to be used more frequently. The following at-grade path and trail crossing treatments are guidelines only and identify desirable elements that can be incorporated into crossings to make them more accommodating to path and trail users. These guidelines must be considered in combination with all other roadway and intersection design parameters and constraints.

Enhanced Signalized Crossings

Where trails and paths encounter signalized intersections the following guidelines apply:

- The design may include corner improvements on two, three or four corners and one, two, three of four cross-walk improvements, depending on the trail sand paths coming together at the corner.
- Provide ladder markings (lines painted parallel to flow of traffic) of crosswalks and curb ramps at right angles to moving traffic
- Where feasible, provide curb extensions with landscaping and detectable warnings
- Provide accessible push button pedestrian signals
- Provide adequate sightline distances that consider adequate time, visibility, warning signs, and lighting
- Do not impede sightlines at roadway crossings with signage, bus stops, benches, parked vehicles, light posts, vegetation, or other objects that could reduce user visibility
- Where feasible, provide a roadway refuge or median area that permits a "safe zone" when traffic is moving on a multi-lane or divided roadway
- Where feasible, provide traffic calming designs, such as flashing lights alerting drivers to a path/trail crossing area ahead in the roadway, decreased speed limits, roundabouts, narrowed travel lanes, speed tables or plateaus, and stop bars
- Provide for pedestrian scale lighting

- Whenever possible, provide ADA curb cuts for people with disabilities the same width as the trail/path tread or greater
- Where a City, Neighborhood or Equestrian Only Trail encounters signalized intersections
- Provide a "gathering space" or a holding zone/ area that will permit a group of equines to stand and wait for the appropriate and safe time to complete a roadway crossing. The trail surface width should fan out to incorporate a minimum 25-foot (7.62 m) wide area parallel to the edge of the roadway that is also a minimum of 15 feet (4.572 m) in depth from the edge of the roadway
- Provide an equestrian push button-activated crosswalk signal mounted within the gathering space at a height of 6' at any corner crossed by the trail
- Fencing or barriers to separate trail from path, adjoining property, etc.



Mid-block Crossings

At the locations where a trail or path follows a utility or canal corridor and intersects a street where no other street or potentially signalized intersection exists, the crossing can be enhanced to better warn roadway and path/trail users of this crossing. Many of the same features of the enhanced At-Grade Crossing apply to Mid-Block Crossings as well. These features would include one or more of these elements:

- Ladder or continental style marked crosswalks
- Adequate sightline distance considering time, visibility, amenities, warning, signs and lighting
- Gather spaces at each crossing side
- Push button activated crosswalk signals at 6' height for equestrians and at pedestrian heights at sides of road and within the median
- Detectible warning at street/path/trail edge
- Crossing island or median (raised or flush) safe zone with curb ramps (if raised) and staggered or "Danish Offset" the same width or greater than path/trail
- Where feasible, provide traffic calming designs such as decreased speed limits, narrowed travel lanes, speed tables or plateaus, and stop bars
- Pedestrian warning signs (refer to Manual on Uniform Traffic control Devices (MUTCD) (15) for sign placement criteria). Consider yield signs, flashing yield signs, or traffic signals
- Advance yield lines
- Appropriate pedestrian scale lighting
- Refer to the AASHTO "Guide for the Planning, Design and Operations of Pedestrian Facilities", July 2004, Section 3.4 "Mid-block Crossings" and the AASHTO Guide for the Development of Bicycle Facilities, 1999, pages 46-53 for additional information

Unless many of the above features are implemented the feasibility of providing any mid-block crossing decreases as a roadway is widened, and speeds and traffic increase. As this situation develops over time, it is possible that trails along mid-block corridors would be routed to nearby signalized or grade-separated crossings and mid-block crossings will be discouraged through signage, fencing and/ or barriers.

Transportation planners and officials are exploring additional mid-block crossing options. The following is taken from the Maricopa Association of Government Regional Bikeway Master Plan, 2007 and discusses other mid-block crossing treatments

that are being used throughout the Country. The "HAWK" signal discussed below is gaining greater acceptance and has been installed throughout Tucson, AZ.

In the absence of a grade-separated crossing in mid-block locations, signalized crossings should be considered if warranted. These would include both full and half pedestrian signals, and could potentially incorporate split pedestrian phasing. The Manual on Uniform Traffic Control Devices (MUTCD) provides warrants for the installation of traffic signals. Any of the warrants described in the MUTCD can be used for pathway/roadway intersections. When using the vehicular warrants, however, only bicyclists should be considered as volume on the path. Alternatively, bicyclists can be counted as pedestrians for the application of the Pedestrian Volumes warrant.

"The HAWK and PXO treatments discussed below offer additional methods to improve the sense of safety, comfort, and convenience of bicyclists and pedestrians when crossing roadways at mid-block locations. They are considered experimental treatments and although not currently fully approved by the MUTCD. A Request to Experiment can be obtained from FHWA for all installations of non-street standard treatments, such as the HAWK and PXO.

The "HAWK"

The "HAWK," a pedestrian activated beacon used at otherwise un-signalized crossings, was approved by Committee at the MUTCD annual meeting in January 2007. This committee includes all of the MUTCD's voting member agencies such as the American Association of State highway and Transportation Officials (AASHTO), Institute of Traffic Engineers (ITE), American Automobile Association (AAA), etc. Prior to full approval, the HAWK must next have general approval from FHWA. FHWA would then include the HAWK in its rulemaking package for publication in the Federal Register, which would allow for the signal to be fully official.

To activate the HAWK, the pedestrian or bicyclist presses a button so the signal stops traffic along the roadway allowing pedestrian or bicyclist crossings. It allows the path to clear before motor vehicle traffic resumes. HAWK signals give motorists more positive guidance than a flashing yellow beacon while causing less delay to motorists than a signal. They are typically used in combination with other crossing treatments such raised medians, ladder or continental style marked crosswalks, staggered crosswalks or Danish offsets, pedestrian crossing warning, advanced pedestrian crossing warning

signs, advance stop bars, and appropriate pedestrian scale lighting. They can be located in such a way as to not interfere with roadway signal timing.

The "PXO"

The PXO treatment is a combination of signage markings and pedestrian activated strobe and feedback devices. Signage for the PXO includes advance warning signs (W11-2) with AHEAD supplemental plaques (W16-9p), and YIELD HERE TO PEDS signs (R1-5). Note that the YIELD HERE TO PEDS signs are an indication of the appropriate location and do not mandate yielding behavior if no pedestrians are present. Pavement markings include yield markings and solid white lane lines (on divided multi-lane roads). The length of these lines is dependent upon the design stopping sight distance for the roadway. The pedestrian activated treatments are W11-2 signs with built in rectangular strobe flashers. Additionally, pedestrian visible strobes and a recorded message inform pedestrians of when the crossing is activated and instruct them to wait for motorists to yield. High visibility crosswalks are used with the PXO crossing treatment.

Wash Low-flow or Dip crossings

These crossings can be used to cross drainage areas where a bridge structure is financially unfeasible or where flows are small or infrequent. They can be installed as an initial phase and eventually replaced by a separate Pedestrian/Bridge Overpass or a Shared Bridge, thereby ensuring year round use. They should be built to the following standards:

- 12' vertical clearance
- Width the same as the path or trail
- Optional area lighting
- Multi-use trail/path signage at both ends including Trail Etiquette Signs
- Unpaved trail crossing: washed concrete with 3/8"-1/2" exposed broken aggregate. Or incise grooves in concrete perpendicular to direction of trail traveler, 1/4-1/2" deep @ 1-2" intervals. Thickened concrete edges
- Paved path crossings: heavy broom finish in concrete perpendicular to direction of path traveler. Thickened concrete edges



Path and Trail Corridor Guidelines

These recommended corridor widths are guidelines only and identify the ideal spatial relationships of paths and trails to each other, to roadways, buildings, walls, fences, property lines and other features. Trail and path corridor widths should be maintained within these situations to promote safety, a respect for the environment, and respect for neighbors. The recommended corridor width adjacent to roads is comprised of a combination of the path and/or trail, available right of way (ROW width minus pavement and median width), easements, tracts and/or setbacks. likely that these recommended widths can be accommodated within the available ROW and land already set aside for utility easements, building and/or landscape setbacks.

Trail and path users are particularly sensitive to their adjacency to roadways. To enhance the user's sense of security and comfort along streets, the recommended setback between the street and trail/path should be greatest where the streets are widest, busiest and noisiest. Narrower setbacks are acceptable along quiet neighborhood streets. Therefore, the recommended corridor width will vary based upon the type of street and the type of trail/path.

Paths and trails also occur in situations that have no relationship to roads. In Maricopa, these linear corridors follow washes, canals, utility corridors and railroads or are located within an open space corridor within a development.

The following general guidelines apply to all corridors:

- If minimum recommended corridor width is not available, priority should be given first to providing the recommended distance between the edge of roadway pavement and the path/ trail, and second to the recommended distance from the path/trail edge to the adjacent barrier, edge or property line defined as a fence, wall, building, etc.
- If harness horses/carts are anticipated on any trail, the minimum trail width should be 12'.
- Recommended setback dimensions are inclusive of the shoulder/vegetation clearance, the 4' wide unpaved shoulder, and sidewalk.

- If a high level of shared-use is anticipated to occur, where sight distances are limited, and slopes encourage faster bicycle use, the minimum path width should be 12' (per AASHTO Guidelines).
- Paths may meander gently with a minimum radius of 200'.
- Where space allows, provide minimum 6' distance between trees and paths and trails.
- Provide minimum 10' distance between paths/ trails and plants with thorns or stickers.
- Keep trees a minimum of 10' from buried sewer lines when applicable.
- Signs, benches, or any other vertical element should be kept a minimum of 3' from the edge of paths and trails.
- Standards expressed are minimums. Landscaped setback areas should be as wide as possible.
- See AASHTO's 1999 Guide for the Development of Bicycle Facilities, page 33, "Shared Use Paths" for more information.

Implementation

Introduction

Implementation of the 2008 City of Maricopa Parks, Trails and Open Space Master plan will improve the quality of life of the residents of the city. The proposed community parks will provide a variety of recreation opportunities. The proposed Trail system will create a network of pedestrian and bike friendly routes throughout the planning area. Specialty Parks will be used to preserve the unique qualities of the city for future generations.

The proposed parks, trails and open space will require additional land to be acquired and developed. An ample staff will be necessary for the long term maintenance, operation and success of each facility.

Residents and city staff have determined the priorities for the short term (2009 – 2015) should be the development of: Community Park 2 and Community Park 3. Pacana Park is currently undergoing an expansion; this expansion has been taken into account when calculating level of service requirements. These two parks enable the City of Maricopa's park system the ability to serve a population 44,690. In addition two the above facilities a community center is among the highest priorities of the current residences. Due to space considerations within the current city limits this was left out of the community parks until Community Park 4, however, if possible a community park with an aquatic center should be implemented as soon as possible.

In addition the start of the trail system throughout the current city limits will greatly enhance the City of Maricopa. The trail system will be created from a combination of developer and City established trails.

Specialty parks should be developed as land and opportunities arise. The nature of these parks makes the planning and design of each as unique as the different sites.

Table 26:Capital Improvement Plan

Table 2010apital improver							
Facility	Acres	# Parking Stalls	LOS Standard	Pacana Park	Acres Needed	Parking Stalls Needed	Population Served
Baseball	4	60	50000	0	0	0	0
Little League/Softball	2.25	65	12500	2	4.5	130	25000
Softball	3.5	65	12500	0	0	0	0
Soccer Lighted	3	70	7500	2	6	140	15000
Soccer non-lighted	3	35		1	3	35	
Soccer Overlay on Ballfield				2			
Multi-use Fields	2			0	0		
Basketball	0.2	8	5000	2	0.4	16	10000
Volleyball	0.2	8	10000	0	0	0	0
Tennis	0.2	4	6000	2	0.4	8	12000
Children's Play Areas	0.2		5000	2	0.4		10000
BMX Park	1	25	100000	0	0	0	0
Roller Hockey	0.3	25	50000	0	0	0	0
Skate Park	0.6	25	100000	0	0	0	0
Dog Park	3	30	50000	0	0	0	0
Picnic Ramadas	0.02	8		3	0.06	24	
Restroom	0.02			1	0.02		
Splash Pad	0.2	25	50000	0	0	0	0
Swimming Pools	1	145	60000	0	0	0	0
Community Center	1.2	250	60000	0	0	0	0
Maintenance Facility	1			0.25	0.5		
Amphitheater	1.5			0	0.5		
Lake				0	2		
Trail Head	1.25	30		0	0	0	
Neighborhood Equestrian Park	3			0	0		
Subtotal					18	353	
Existing Acreage					29	-131	short parking
Parking Acreage Needed Total Park Acreage Needed					3 21		
Retention and open space Needed					5		
Total Park				acres	29	222	parking
2.33	Bacres/10	00 populati	on	12278 population			

Facility	Acres	# Parking Stalls	LOS Standard	CP- A Desert Wind Park	Acres Needed	Parking Stalls Needed	Population Served
Baseball	4	60	50000	0	0	0	0
Little League/Softball	2.25	65	12500	4	9	260	50000
Softball	3.5	65	12500	0	0	0	0
Soccer Lighted	3	70	7500	2	6	140	15000
Soccer non-lighted	3	35		0	0	0	
Soccer Overlay on Ballfield				4			
Multi-use Fields	2			0	0		
Basketball	0.2	8	5000	4	0.8	32	20000
Volleyball	0.2	8	10000	0	0	0	0
Tennis	0.2	4	6000	0	0	0	0
Children's Play Areas	0.2		5000	1	0.2		5000
BMX Park	1	25	100000	0	0	0	0
Roller Hockey	0.3	25	50000	0	0	0	0
Skate Park	0.6	25	100000	0	0	0	0
Dog Park	3	30	50000	1	3	30	50000
Picnic Ramadas	0.02	8		5	0.1	40	
Restroom	0.02			2	0.04		
Splash Pad	0.2	25	50000	1	0.2	25	50000
Swimming Pools	1	145	60000	0	0	0	0
Community Center	1.2	250	60000	0	0	0	0
Maintenance Facility	1			0.25	0.25		
Amphitheater	1.5			1	1.5		
Lake				1	3.5		
Trail Head	1.25	30		0	0	0	
Neighborhood Equestrian Park	3			0	0		
Subtotal					25	527	
Existing Acreage Parking Acreage Needed					35 1	-348	short parking
Total Park Acreage Needed					26		
Retention and open space Needed					10		
Total Park 2.33	acres		179 population	parking			

Facility	Acres	# Parking Stalls	LOS Standard	CP- B Planned Community Park	Acres Needed	Parking Stalls Needed	Population Served
Baseball	4	60	50000	0	0	0	0
Little League/Softball	2.25	65	12500	4	9	260	50000
Softball	3.5	65	12500	0	0	0	0
Soccer Lighted	3	70	7500	4	12	280	30000
Soccer non-lighted	3	35		0	0	0	
Soccer Overlay on Ballfield				4			
Multi-use Fields	2			0	0		
Basketball	0.2	8	5000	0	0	0	0
Volleyball	0.2	8	10000	0	0	0	0
Tennis	0.2	4	6000	0	0	0	0
Children's Play Areas	0.2		5000	1	0.2		5000
BMX Park	1	25	100000	0	0	0	0
Roller Hockey	0.3	25	50000	0	0	0	0
Skate Park	0.6	25	100000	0	0	0	0
Dog Park	3	30	50000	0	0	0	0
Picnic Ramadas	0.02	8		6	0.12	48	
Restroom	0.02			2	0.04		
Splash Pad	0.2	25	50000	0	0	0	0
Swimming Pools	1	145	60000	0	0	0	0
Community Center	1.2	250	60000	0	0	0	0
Maintenance Facility	1			0.25	0.25		
Amphitheater	1.5			0	0		
Lake				0	0		
Trail Head	1.25	30		0	0	0	
Neighborhood Equestrian Park	3			0	0		
Subtotal					22	588	
Existing Acreage Parking Acreage Needed					0 5		
Total Park Acreage Needed					5 26		
Retention and open space Needed					7		
Total Park 2.33	00 populati	acre		588 population	parking		

Facility	Acres	# Parking Stalls	LOS Standard	VP- A Planned Village Park	Acres Needed	Parking Stalls Needed	Population Served
Baseball	4	60	50000	1	4	60	50000
Little League/Softball	2.25	65	12500	4	9	260	50000
Softball	3.5	65	12500	4	14	260	50000
Soccer Lighted	3	70	7500	6	18	420	45000
Soccer non-lighted	3	35		0	0	0	
Soccer Overlay on Ballfield	t			9			
Multi-use Fields	2			0	0		
Basketball	0.2	8	5000	8	1.6	64	40000
Volleyball	0.2	8	10000	12	2.4	96	120000
Tennis	0.2	4	6000	8	1.6	32	48000
Children's Play Areas	0.2		5000	4	0.8		20000
BMX Park	1	25	100000	1	1	25	100000
Roller Hockey	0.3	25	50000	1	0.3	25	50000
Skate Park	0.6	25	100000	1	0.6	25	100000
Dog Park	3	30	50000	2	6	60	100000
Picnic Ramadas	0.02	8		20	0.4	160	
Restroom	0.02			4	0.08		
Splash Pad	0.2	25	50000	1	0.2	25	50000
Swimming Pools	1	145	60000	1	1	145	60000
Community Center	1.2	250	60000	1	1.2	250	60000
Maintenance Facility	1			1	1		
Amphitheater	1.5			1	1.5		
Lake				1	3		
Trail Head	1.25	30		0	0	0	
Neighborhood Equestrian Park	3			0	0		
Subtotal Existing Acreage Parking Acreage Needed Total Park Acreage Needed Retention and open space Needed					68 0 15 83 33	1907	
Total Park	.33acres/100	00 populati	on	acres		1907	parking

Facility	Acres	# Parking Stalls	LOS Standard	CP- C Planned Community Park	Acres Needed	Parking Stalls Needed	Population Served
Baseball	4	60	50000	0	0	0	0
Little League/Softball	2.25	65	12500	4	9	260	50000
Softball	3.5	65	12500	0	0	0	0
Soccer Lighted	3	70	7500	4	12	280	30000
Soccer non-lighted	3	35		0	0	0	
Soccer Overlay on Ballfield				4			
Multi-use Fields	2			0	0		
Basketball	0.2	8	5000	2	0.4	16	10000
Volleyball	0.2	8	10000	2	0.4	16	20000
Tennis	0.2	4	6000	0	0	0	0
Children's Play Areas	0.2		5000	1	0.2		5000
BMX Park	1	25	100000	0	0	0	0
Roller Hockey	0.3	25	50000	0	0	0	0
Skate Park	0.6	25	100000	0.5	0.3	12.5	50000
Dog Park	3	30	50000	1	3	30	50000
Picnic Ramadas	0.02	8		4	0.08	32	
Restroom	0.02			2	0.04		
Splash Pad	0.2	25	50000	1	0.2	25	50000
Swimming Pools	1	145	60000	1	1	145	60000
Community Center	1.2	250	60000	1	1.2	250	60000
Maintenance Facility	1			0.25	0.25		
Amphitheater	1.5			0	0		
Lake				0			
Trail Head	1.25	30		0	0	0	
Neighborhood Equestrian Park	3			0	0		
Subtotal					28	1067	
Existing Acreage					0		
Parking Acreage Needed Total Park Acreage Needed					9 37		
Retention and open space Needed					15		
INCCUCU					10		
Total Park				acres	s 60	1067	parking
2.33	00 populati	25693 population					
Estimat	ed Cost				\$28,969	,426	

Facility	Acres	# Parking Stalls	LOS Standard	VP- B Planned Village Park	Acres Needed	Parking Stalls Needed	Population Served
Baseball	4	60	50000	0	0	0	0
Little League/Softball	2.25	65	12500	4	9	260	50000
Softball	3.5	65	12500	0	0	0	0
Soccer Lighted	3	70	7500	4	12	280	30000
Soccer non-lighted	3	35		0	0	0	
Soccer Overlay on Ballfield				4			
Multi-use Fields	2			0	0		
Basketball	0.2	8	5000	4	0.8	32	20000
Volleyball	0.2	8	10000	2	0.4	16	20000
Tennis	0.2	4	6000	4	0.8	16	24000
Children's Play Areas	0.2		5000	3	0.6		15000
BMX Park	1	25	100000	0	0	0	0
Roller Hockey	0.3	25	50000	1	0.3	25	100000
Skate Park	0.6	25	100000	1	0.6	25	100000
Dog Park	3	30	50000	1	3	30	50000
Picnic Ramadas	0.02	8		16	0.32	128	
Restroom	0.02			3	0.06		
Splash Pad	0.2	25	50000	1	0.2	25	50000
Swimming Pools	1	145	60000	1	1	145	60000
Community Center	1.2	250	60000	1	1.2	250	60000
Maintenance Facility	1			1	1		
Amphitheater	1.5			0	0		
Lake				0	0		
Trail Head	1.25	30		1	1.25	30	
Neighborhood Equestrian Park	3			0	0		
Subtotal Existing Acreage Parking Acreage Needed Total Park Acreage Needed Retention and open space					33 0 10 43	1262	
Total Park 2.33	acres		1262 population	oarking			
Estima	ted Cost				\$31,2	22,570	

Facility	Acres	# Parkinç Stalls	J LOS Standard	CP- D Planned Community Park	Acres Needed	Parking Stalls Needed	Population Served
Baseball	4	60	50000	0	0	0	0
Little League/Softball	2.25	65	12500	4	9	260	50000
Softball	3.5	65	12500	0	0	0	0
Soccer Lighted	3	70	7500	2	6	140	15000
Soccer non-lighted	3	35		0	0	0	
Soccer Overlay on Ballfield	t			4			
Multi-use Fields	2			2	4		
Basketball	0.2	8	5000	4	0.8	32	20000
Volleyball	0.2	8	10000	2	0.4	16	20000
Tennis	0.2	4	6000	0	0	0	0
Children's Play Areas	0.2		5000	2	0.4		10000
BMX Park	1	25	100000	1	1	25	100000
Roller Hockey	0.3	25	50000	0	0	0	0
Skate Park	0.6	25	100000	0	0	0	0
Dog Park	3	30	50000	1	3	30	50000
Picnic Ramadas	0.02	8		10	0.2	80	
Restroom	0.02			1	0.02		
Splash Pad	0.2	25	50000	1	0.2	25	50000
Swimming Pools	1	145	60000	0	0	0	0
Community Center	1.2	250	60000	0	0	0	0
Maintenance Facility	1			0.5	0.5		
Amphitheater	1.5			0	0		
Lake				0	3		
Trail Head	1.25	30		0	0	0	
Neighborhood Equestrian Park	3			0	0		
Subtotal					29	608	
Existing Acreage					0		
Parking Acreage Needed Total Park Acreage Needed					5 33		
Retention and open space Needed					13		
Total Park	.33acres/100	M nonulat	ion	acre		608 3 population	parking
2	.53acres/100	o hohnigi	ion		22108	population	

Facility	Acres	# Parking Stalls	LOS Standard	CP- E Planned Community Park	Acres Needed	Parking Stalls Needed	Population Served
Baseball	4	60	50000	0	0	0	0
Little League/Softball	2.25	65	12500	4	9	260	50000
Softball	3.5	65	12500	0	0	0	0
Soccer Lighted	3	70	7500	2	6	140	15000
Soccer non-lighted	3	35		0	0	0	
Soccer Overlay on Ballfield				4			
Multi-use Fields	2			0	0		
Basketball	0.2	8	5000	2	0.4	16	10000
Volleyball	0.2	8	10000	2	0.4	16	20000
Tennis	0.2	4	6000	0	0	0	0
Children's Play Areas	0.2		5000	2	0.4		10000
BMX Park	1	25	100000	0	0	0	0
Roller Hockey	0.3	25	50000	0	0	0	100000
Skate Park	0.6	25	100000	0.5	0.3	12.5	100000
Dog Park	3	30	50000	1	3	30	50000
Picnic Ramadas	0.02	8		10	0.2	80	
Restroom	0.02			2	0.04		
Splash Pad	0.2	25	50000	1	0.2	25	50000
Swimming Pools	1	145	60000	0	0	0	0
Community Center	1.2	250	60000	0	0	0	0
Maintenance Facility	1			0.25	0.25		
Amphitheater	1.5			0	0		
Lake				0			
Trail Head	1.25	30		0	0	0	
Neighborhood Equestrian Park	3			0	0		
Subtotal					20	580	
Existing Acreage Parking Acreage Needed					0 5		
Total Park Acreage Needed					5 25		
Retention and open space Needed					10		
Total Park	acres 39 580 parking 16927 population						

Facility	Acres	# Parking Stalls	LOS Standard	CP- F Planned Community Park	Acres Needed	Parking Stalls Needed	Population Served
Baseball	4	60	50000	0	0	0	0
Little League/Softball	2.25	65	12500	0	0	0	0
Softball	3.5	65	12500	0	0	0	0
Soccer Lighted	3	70	7500	0	0	0	0
Soccer non-lighted	3	35		0	0	0	
Soccer Overlay on Ballfield				0			
Multi-use Fields	2			5	10		
Basketball	0.2	8	5000	2	0.4	16	10000
Volleyball	0.2	8	10000	2	0.4	16	20000
Tennis	0.2	4	6000	0	0	0	0
Children's Play Areas	0.2		5000	1	0.2		5000
BMX Park	1	25	100000	1	1	25	100000
Roller Hockey	0.3	25	50000	0	0	0	0
Skate Park	0.6	25	100000	0	0	0	0
Dog Park	3	30	50000	1	3	30	50000
Picnic Ramadas	0.02	8		10	0.2	80	
Restroom	0.02			1	0.02		
Splash Pad	0.2	25	50000	1	0.2	25	50000
Swimming Pools	1	145	60000	0	0	0	0
Community Center	1.2	250	60000	0	0	0	0
Maintenance Facility	1			0.5	0.5		
Amphitheater	1.5			0	0		
Lake				0			
Trail Head	1.25	30		1	1.25	30	
Neighborhood Equestrian Park	3			2	6	1	
Subtotal					23	222	
Existing Acreage Parking Acreage Needed					0		
Total Park Acreage Needed					2 25		
Retention and open space Needed					10		
Total Park	acres			parking			
		00 populati	on) population	
Estimat	ed Cost				\$8,26	1,773	

Facility	Acres	# Parking Stalls	LOS Standard	VP- C Planned Village Park	Acres Needed	Parking Stalls Needed	Population Served
Baseball	4	60	50000	0	0	0	0
Little League/Softball	2.25	65	12500	4	9	260	50000
Softball	3.5	65	12500	4	14	260	50000
Soccer Lighted	3	70	7500	6	18	420	45000
Soccer non-lighted	3	35		0	0	0	
Soccer Overlay on Ballfield				8			
Multi-use Fields	2			4	8		
Basketball	0.2	8	5000	4	0.8	32	20000
Volleyball	0.2	8	10000	4	0.8	32	40000
Tennis	0.2	4	6000	8	1.6	32	48000
Children's Play Areas	0.2		5000	4	0.8		20000
BMX Park	1	25	100000	1	1	25	100000
Roller Hockey	0.3	25	50000	1	0.3	25	50000
Skate Park	0.6	25	100000	1	0.6	25	100000
Dog Park	3	30	50000	2	6	60	100000
Picnic Ramadas	0.02	8		20	0.4	160	
Restroom	0.02			4	0.08		
Splash Pad	0.2	25	50000	1	0.2	25	50000
Swimming Pools	1	145	60000	0	0	0	0
Community Center	1.2	250	60000	0.5	0.6	125	30000
Maintenance Facility	1			1	1		
Amphitheater	1.5			1	1.5		
Lake				0			
Trail Head	1.25	30		3	3.75	90	
Neighborhood Equestrian Park	3			1	3		
Subtotal					71	1571	
Existing Acreage					0		
Parking Acreage Needed Total Park Acreage Needed					13 84		
Retention and open space Needed					34		
Total Park				acres	130	1571	parking
2.33	acres/10	00 populati	on		55921	l population	
Estimat	ed Cost				\$35,3	16,772	

Facility	Acres	# Parking Stalls	LOS Standard	GP- A Planned Grand Park	Acres Needed	Parking Stalls Needed	Population Served
Baseball	4	60	50000	4	16	240	200000
Little League/Softball	2.25	65	12500	8	18	520	100000
Softball	3.5	65	12500	8	28	520	100000
Soccer Lighted	3	70	7500	16	48	1120	120000
Soccer non-lighted	3	35		0	0	0	
Soccer Overlay on Ballfield				20			
Multi-use Fields	2			10	20		
Basketball	0.2	8	5000	8	1.6	64	40000
Volleyball	0.2	8	10000	12	2.4	96	120000
Tennis	0.2	4	6000	12	2.4	48	72000
Children's Play Areas	0.2		5000	5	1		25000
BMX Park	1	25	100000	0	0	0	0
Roller Hockey	0.3	25	50000	2	0.6	50	100000
Skate Park	0.6	25	100000	1	0.6	25	100000
Dog Park	3	30	50000	2	6	60	100000
Picnic Ramadas	0.02	8		30	0.6	240	
Restroom	0.02			6	0.12		
Splash Pad	0.2	25	50000	1	0.2	25	50000
Swimming Pools	1	145	60000	2	2	290	120000
Community Center	1.2	250	60000	2	2.4	500	120000
Maintenance Facility	1			1	1		
Amphitheater	1.5			1	1.5		
Lake				1	5		
Trail Head	1.25	30		1	1.25	30	
Neighborhood Equestrian Park	3			0	0		
Subtotal					159	3828	
Existing Acreage Needed					0		
Parking Acreage Needed Total Park Acreage Needed					31 189		
Retention and open space Needed					76		
Needed					70		
Total Park	acres	296	3828	parking			
2.33	acres/10	00 populati	on	127020 population			
Estimat	ed Cost				\$97,590	,141	

Facility	Acres	# Parking Stalls	LOS Standard	VP- D Planned Village Park	Acres Needed	Parking Stalls Needed	Population Served
Baseball	4	60	50000	0	0	0	0
Little League/Softball	2.25	65	12500	4	9	260	50000
Softball	3.5	65	12500	4	14	260	50000
Soccer Lighted	3	70	7500	6	18	420	45000
Soccer non-lighted	3	35		0	0	0	
Soccer Overlay on Ballfield				14			
Multi-use Fields	2			0	0		
Basketball	0.2	8	5000	4	0.8	32	20000
Volleyball	0.2	8	10000	4	0.8	32	40000
Tennis	0.2	4	6000	0	0	0	0
Children's Play Areas	0.2		5000	3	0.6		15000
BMX Park	1	25	100000	1	1	25	100000
Roller Hockey	0.3	25	50000	2	0.6	50	100000
Skate Park	0.6	25	100000	1	0.6	25	100000
Dog Park	3	30	50000	2	6	60	100000
Picnic Ramadas	0.02	8		16	0.32	128	
Restroom	0.02			4	0.08		
Splash Pad	0.2	25	50000	1	0.2	25	50000
Swimming Pools	1	145	60000	1	1	145	60000
Community Center	1.2	250	60000	1	1.2	250	60000
Maintenance Facility	1			1	1		
Amphitheater	1.5			1	1.5		
Lake				1	3		
Trail Head	1.25	30		1	1.25	30	
Neighborhood Equestrian Park	3			1	3		
Subtotal Existing Acreage Parking Acreage Needed Total Park Acreage Needed Retention and open space Needed					64 0 14 78 31	1742	
Total Park 2.3	33acres/100	00 populatio	on	acres		1742 2 population	parking

Facility	Acres	# Parking Stalls	LOS Standard	VP- E Planned Village Park	Acres Needed	Parking Stalls Needed	Population Served
Baseball	4	60	50000	0	0	0	0
Little League/Softball	2.25	65	12500	4	9	260	50000
Softball	3.5	65	12500	4	14	260	50000
Soccer Lighted	3	70	7500	6	18	420	45000
Soccer non-lighted	3	35		0	0	0	
Soccer Overlay on Ballfield				8			
Multi-use Fields	2			0	0		
Basketball	0.2	8	5000	4	0.8	32	20000
Volleyball	0.2	8	10000	2	0.4	16	20000
Tennis	0.2	4	6000	8	1.6	32	48000
Children's Play Areas	0.2		5000	4	0.8		20000
BMX Park	1	25	100000	0	0	0	0
Roller Hockey	0.3	25	50000	1	0.3	25	50000
Skate Park	0.6	25	100000	1	0.6	25	100000
Dog Park	3	30	50000	2	6	60	100000
Picnic Ramadas	0.02	8		16	0.32	128	
Restroom	0.02			4	0.08		
Splash Pad	0.2	25	50000	1	0.2	25	50000
Swimming Pools	1	145	60000	1	1	145	60000
Community Center	1.2	250	60000	1	1.2	250	60000
Maintenance Facility	1			1	1		
Amphitheater	1.5			0	0		
Lake				1			
Trail Head	1.25	30		1	1.25	30	
Neighborhood Equestrian Park	3			0	0		
Subtotal	•				57	1708	
Existing Acreage					0		
Parking Acreage Needed Total Park Acreage Needed					14 70		
Retention and open space							
Needed					28		
Total Park				acres	112	1708	parking
2.33	acres/10	00 populati	on			population '	
2.33acres/1000 population Estimated Cost				\$40,7	23,994		

Facility	Acres	# Parking Stalls	LOS Standard	CP- G Planned Community Park	Acres Needed	Parking Stalls Needed	Population Served
Baseball	4	60	50000	0	0	0	0
Little League/Softball	2.25	65	12500	2	4.5	130	25000
Softball	3.5	65	12500	0	0	0	0
Soccer Lighted	3	70	7500	2	6	140	15000
Soccer non-lighted	3	35		0	0	0	
Soccer Overlay on Ballfield				4			
Multi-use Fields	2			1	2		
Basketball	0.2	8	5000	2	0.4	16	10000
Volleyball	0.2	8	10000	1	0.2	8	10000
Tennis	0.2	4	6000	2	0.4	8	12000
Children's Play Areas	0.2		5000	1	0.2		5000
BMX Park	1	25	100000	0	0	0	0
Roller Hockey	0.3	25	50000	0	0	0	0
Skate Park	0.6	25	100000	0	0	0	0
Dog Park	3	30	50000	1	3	30	50000
Picnic Ramadas	0.02	8		8	0.16	64	
Restroom	0.02			1	0.02		
Splash Pad	0.2	25	50000	1	0.2	25	50000
Swimming Pools	1	145	60000	0	0	0	0
Community Center	1.2	250	60000	0	0	0	0
Maintenance Facility	1			0.5	0.5		
Amphitheater	1.5			0	0		
Lake				0	0		
Trail Head	1.25	30		1	1.25	30	
Neighborhood Equestrian Park	3	,		2	6		
Subtotal					25	451	
Existing Acreage Parking Acreage Needed					0 4		
Total Park Acreage Needed					4 28		
Retention and open space Needed					11		
Total Park 2.33acres/1000 population			acres		451 2 population	parking	

Facility	Acres	# Parking Stalls	LOS Standard	GP- B Planned Grand Park	Acres Needed	Parking Stalls Needed	Population Served
Baseball	4	60	50000	2	8	120	100000
Little League/Softball	2.25	65	12500	8	18	520	100000
Softball	3.5	65	12500	6	21	390	75000
Soccer Lighted	3	70	7500	12	36	840	90000
Soccer non-lighted	3	35		0	0	0	
Soccer Overlay on Ballfield				28			
Multi-use Fields	2			4	8		
Basketball	0.2	8	5000	8	1.6	64	40000
Volleyball	0.2	8	10000	12	2.4	96	120000
Tennis	0.2	4	6000	8	1.6	32	48000
Children's Play Areas	0.2		5000	4	0.8		20000
BMX Park	1	25	100000	0	0	0	0
Roller Hockey	0.3	25	50000	4	1.2	100	200000
Skate Park	0.6	25	100000	0	0	0	0
Dog Park	3	30	50000	1	3	30	50000
Picnic Ramadas	0.02	8		24	0.48	192	
Restroom	0.02			6	0.12		
Splash Pad	0.2	25	50000	1	0.2	25	50000
Swimming Pools	1	145	60000	1	1	145	60000
Community Center	1.2	250	60000	1	1.2	250	60000
Maintenance Facility	1			1	1		
Amphitheater	1.5			1	1.5		
Lake				1	4		
Trail Head	1.25	30		0	0	0	
Neighborhood Equestrian Park	3			0	0		
Subtotal Existing Acreage					111 0	2804	
Parking Acreage Needed					23		
Total Park Acreage Needed Retention and open space Needed					134 53		
Total Park 2.33acres/1000 population			acres	210	2804 2 population	parking	

Facility	Acres	# Parking Stalls	LOS Standard	VP- F Planned Village Park	Acres Needed	Parking Stalls Needed	Population Served
Baseball	4	60	50000	0	0	0	0
Little League/Softball	2.25	65	12500	4	9	260	50000
Softball	3.5	65	12500	4	14	260	50000
Soccer Lighted	3	70	7500	4	12	280	30000
Soccer non-lighted	3	35		0	0	0	
Soccer Overlay on Ballfield				8			
Multi-use Fields	2			4	8		
Basketball	0.2	8	5000	4	0.8	32	20000
Volleyball	0.2	8	10000	4	0.8	32	40000
Tennis	0.2	4	6000	4	0.8	16	24000
Children's Play Areas	0.2		5000	3	0.6		15000
BMX Park	1	25	100000	1	1	25	100000
Roller Hockey	0.3	25	50000	0	0	0	0
Skate Park	0.6	25	100000	1	0.6	25	100000
Dog Park	3	30	50000	2	6	60	100000
Picnic Ramadas	0.02	8		16	0.32	128	
Restroom	0.02			4	0.08		
Splash Pad	0.2	25	50000	1	0.2	25	50000
Swimming Pools	1	145	60000	1	1	145	60000
Community Center	1.2	250	60000	1	1.2	250	60000
Maintenance Facility	1			1	1		
Amphitheater	1.5			1	1.5		
Lake				1	3		
Trail Head	1.25	30		1	1.25	30	
Neighborhood Equestrian Park	3			0	0		
Subtotal					63	1568	
Existing Acreage					0		
Parking Acreage Needed Total Park Acreage Needed					13 76		
Retention and open space Needed	ı				30		
Total Park				acres	119	1568	parking
2.33acres/1000 population					50921	population	

Facility	Acres	# Parking Stalls	LOS Standard	Total Provided	Total Required	Variance	Notes
Baseball	4	60	50000	7	13	-6	Count High School to achive
Little League/Softball	2.25	65	12500	64	53	11	
Softball	3.5	65	12500	34	53	-19	Count LL/Softball
Soccer Lighted	3	70	7500	78	88	-10	Make-up w/non light & overlay
Soccer non-lighted	3	35		1			
Soccer Overlay on Ballfield				125			
Multi-use Fields	2			30			
Basketball	0.2	8	5000	62	132	-70	Count HOA to achive LOS
Volleyball	0.2	8	10000	61	66	-5	Count HOA to achive LOS
Tennis	0.2	4	6000	56	110	-54	Count HOA to achive LOS
Children's Play Areas	0.2		5000	41	132	-91	Count HOA to achive LOS
BMX Park	1	25	100000	6	7	-1	
Roller Hockey	0.3	25	50000	12	13	-1	
Skate Park	0.6	25	100000	8	7	1	
Dog Park	3	30	50000	20	13	7	
Picnic Ramadas	0.02	8		214			
Restroom	0.02			47			
Splash Pad	0.2	25	50000	14	13	1	
Swimming Pools	1	145	60000	9	11	-2	
Community Center	1.2	250	60000	9.5	11	-2	
Maintenance Facility	1			10.75			
Amphitheater	1.5			7			
Lake				7			
Trail Head	1.25	30		10			
Neighborhood Equestrian Park	3			6			
Subtotal							
Existing Acreage							
Parking Acreage Needed Total Park Acreage Needed							
Retention and open space Needed						,	
Total Park				1526	total acres		2.31
2.33	acres/100	00 populati	on			total pop	655110
Estimated Cost						\$482,505,1	32

Table 28: Special Use Parks Capital Improvement Plan

Special Use Parks CIP							
Special Use Park Site	Estimated Cost	Acres	Estimated cost/				
Santa Rosa Wash Green Belt	\$42,954,545	191	\$225,000				
Santa Cruz Wash Green Belt	\$38,181,818	170	\$225,000				
Vekol Wash Open Space/Green Belt	\$33,409,091	191	\$175,000				
Canal Park	\$12,727,273	64	\$200,000				
Linear Park	\$2,424,242	12	\$200,000				
Water Tower Park	\$2,000,000	1	\$2,000,000				
Zephyr Train Park	\$750,000	0.5	\$1,500,000				
Railroad Corridor Park	\$15,909,091	91	\$175,000				
Town Squre - North	\$12,500,000	10	\$1,250,000				
Town Squre - South	\$12,500,000	10	\$1,250,000				
Heritage Farm Park - A	\$5,000,000	10	\$500,000				
Heritage Farm Park - B	\$2,500,000	5	\$500,000				
Heritage Farm Park - C	\$5,000,000	10	\$500,000				
Heritage Farm Park - D	\$2,500,000	5	\$500,000				
Heritage Farm Park - E	\$5,000,000	10	\$500,000				
Heritage Farm Park - F	\$2,500,000	5	\$500,000				

Table 29: Trails Capital Improvement Plan

Trailhead and Trails CIP						
Trailhead	Туре	Estimated Cost				
Trailhead # 1	TH1	\$250,000				
Trailhead # 2	TH2	\$500,000				
Trailhead # 3	TH2	\$500,000				
Trailhead # 4	TH1	\$250,000				
Trailhead # 5	TH1	\$750,000				
Trailhead # 6	TH1	\$250,000				
Trailhead # 7	TH1	\$250,000				
Trailhead # 8	TH2	\$500,000				
Trailhead # 9 (De Anza Trailhead)	TH1E (Special)	\$4,000,000				
Trailhead # 10	TH1E	\$850,000				
Trailhead # 11	TH1E	\$850,000				
Trailhead # 12	TH2E	\$200,000				
Trailhead # 13	TH1E	\$850,000				
Trailhead # 14	TH2E	\$200,000				
Trailhead # 15	TH1E	\$850,000				
Trailhead # 16	TH1E	\$300,000				
Trailhead # 17	TH1	\$250,000				
Trailhead # 18	TH1E	\$300,000				
Trailhead # 19	TH1E	\$850,000				
Trailhead # 20	TH1	\$750,000				
Trailhead # 21	TH1	\$750,000				
Trailhead # 22	TH1	\$250,000				
Trailhead # 23	TH1	\$250,000				
Trailhead # 24	TH2	\$500,000				
Trailhead # 25	TH1E	\$850,000				
Trailhead # 26	TH1E	\$850,000				
Trailhead # 27	TH1E	\$850,000				
Trailhead # 28	TH1E	\$300,000				
Trailhead # 29	TH1E	\$850,000				
Trailhead # 30	TH1	\$750,000				
Trailhead # 31	TH1E	\$300,000				
Trailhead # 32	TH1	\$250,000				
Trailhead # 33	TH1E	\$850,000				
Trailhead # 34	TH1E	\$850,000				
Trailhead # 35	TH1E	\$850,000				

Growth Scenario

Table 27 gives an example of a projected park growth scenario. This was used as a planning tool to ensure the expected build-out population for the City of Maricopa's needs to could be met. The actual order the parks will be built will determined by city staff during future planning efforts.

Table 27:Sample Park Growth Scenario

Park Growth Scenar	0
Park Site	Total Population Served
Pacana Park	12,278
CP- A: Desert Wind Park	28,534
CP- B: Planned Community Park	44,690
VP- A: Planned Village Park	101,139
CP- C: Planned Community Park	126,831
VP- B: Planned Village Park	156,822
CP- D: Planned Community Park	178,991
CP- E: Planned Community Park	195,918
CP- F: Planned Community Park	211,677
VP- C: Planned Village Park	267,599
GP- A: Planned Grand Park	394,618
VP- E: Planned Village Park	442,733
VP- D: Planned Village Park	495,575
CP- G: Planned Community Park	514,227
GP- B: Planned Grand Park	604,189
VP- F: Planned Village Park	655,110

Total Projected Population

660,254

Parks & Recreation Staffing Levels

Staffing levels for park and recreation departments is generally based upon size of community, acres of parks and number/size of recreation programs. Each individual community is unique and will staff a department based upon these "general" criteria. As a guideline to staffing the National Parks and Recreation Association (NRPA) provides several general guidelines for staffing sizing and projecting which include "Department Staff Size/Community Size" (table 30) and "Staff/Park Acre" (table 31). Below is a summary of staff/department size with a current comparison and 20 year projection.

A baseline comparison of similar cities in the region was made to establish a basis for the preferred full time (FTE) staffing level. The cities compared were Phoenix and Scottsdale, Arizona, Santa Clara, California and Henderson, Nevada. The rage of FTE staff was from a high of 1 staff/892 pop. For Scottsdale and the low of 1 staff/1302 pop. For Phoenix, with an average of 1 staff/1189 pop. for the four comparison cities. The recommended FTE suggested for the city of Maricopa is 1 staff/1190 pop.

Table 30: Department Staff Size / Community Size

Year	2015	2020	2030	Build-Out
Population	105,641	181,099	517,651	660,254
Position				
Full-Time / Permanent Employees	105 projected 1/1,000 pop.	## projected 1/1,050 pop.	545 projected 1/1,10 pop.	695 projected 1/1,190 pop.

Maintenance Staff

Many communities use a ratio of maintenance staff/acres of maintained parkland with a range in western cities and towns from 1 staff/ 11 acres parkland up to 1 staff /22+ acres parkland. For future projections it is suggested to split the "turf/landscape" and "native/desert" parkland (table 31). It should be noted that City of Maricopa parks maintenance staff also serves as special event "set-up" crews. As the city grows over the next 20 years a proportional projection of maintenance staff levels should be used.

Table 31: Maintenance Staff Size / Acres of Parkland

Year	2015	2020	2030	Build-Out
"Turf/Landscape" Maintenance Staff	#staff 1 staff / 16 acres current	# staff 1 staff / 16 acres	73 staff 1 staff / 16 acres	96 staff 1 staff / 16 acres
"Native/Desert Maintenance Staff	Staff shared among all parks 0 staff/300 acres current	# staff needed 1 staff/225 acres	# staff needed 1 staff/250 acres	# staff needed 1 staff/250 acres

Appendix A

Public Input Questionnaire Summary

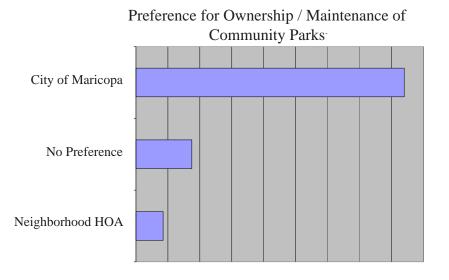
J2 Design distributed more than 1,500 questionnaires to the residents of the City of Maricopa requestiong comments regarding facilities, activities and overall needs of Parks, Trails and Open Space areas. Approximately 500 questionnaires were returned that provided valuable information for the City and J2 Design to help better understand the needs of the community.

Questionnaire questions and results:

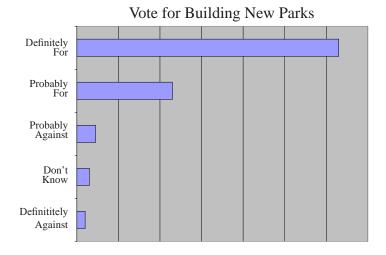
1. Listed below are facilities and services the City of Maricopa Parks and Recreation Department could possibly provide. What importance do you think should be given to each? (A list of 32 services was provided)

Priorities
High
Large Multi-Use Community Parks Lighted Sports Fields (Football, Soccer, Baseball / Softball) Playgrounds for Kids Community Center Water Play Area Public Swimming Pool Fitness Center Trails and Paths Picnic facilities Basketball Courts Volleyball Courts Dog Parks
Tennis Courts Skateboard Parks
Mid
Rock Climbing Walls Historical Parks Amphitheatres Public Golf Course Overnight Camping Facilities BMX Park
Low
Frisbee Golf Equestrian Facilities Gun Range Archery Facilities

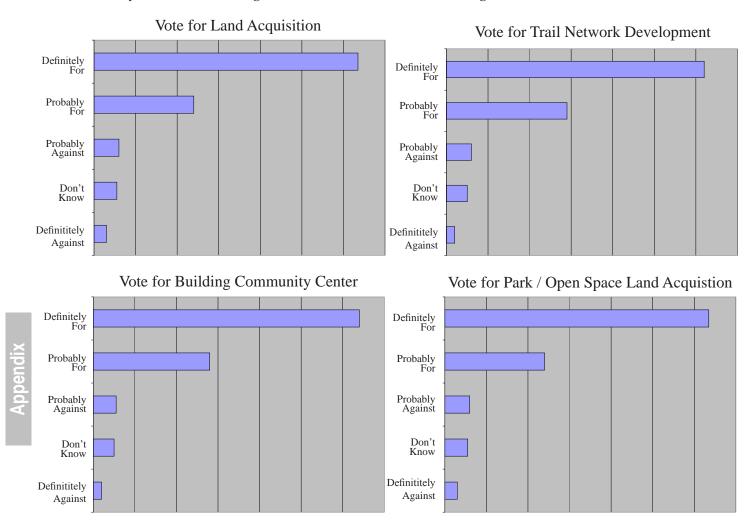
2. Would you prefer a neighborhood park to be owned and maintained by a Neighborhood Home Owner's Assocation or the City of Maricopa?



3. Would you vote for a bond measure that would allow the City of Maricopa to acquire land, construct and operate Parks and Recreation facilities?



4. In general, and only thinking about City of Maricopa Parks and Recreation facilities, how would you vote on funding a measure of each of the following?



Appendix B

Population Projections

Accurate population projections are a critical factor to any planning effort. Prior to the completion of this report the City of Maricopa completed the 2008 City of Maricopa Regional Transportation Plan. In an effort to remain consistent with these planning efforts the Parks, Trails and Open Space Plan has used the same population projections. The projections are in the table below:

Year	2015	2020	2030	Build-Out
Population	105,641	181,099	517,651	660,254

Appendix

Appendix C

Acronym Definitions

AASHTO American Association of State and Highway Transportation Officials

ADA Americans with Disabilities Act

ASLD Arizona State Land Department

BLM Bureau of Land Management

BOR Bureau of Reclamation

DU Dwelling Unit

HOA Homeowners Association

IGA Inter-Governmental Agreement

LOS Level of Service

MPC Master Planned Community

MUTCD Manual on Traffic Control Devices

NRPA National Recreation and Parks Association

PAD Planned Area Development

ROW Right of Way

RP&P Recreation and Public Purposes Permit / Lease

TH Trail Head